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AUG 2 1943



the
**MODERN
HOSPITAL**

VOLUME 61

AUGUST 1943

NUMBER 2



DELAY... the order of the day—except for Weck's **ONE WEEK** Repair Service...



"The E flag awarded Weck for excellence in production of new surgical instruments."



- "Entire output allocated to Government," "Urgent Government orders come first," "Priority Required," "Out of Stock," "Subject to Delay," "Rationed," — today's often seen excuses all of which indicate that **DELAY** is the order of the day, almost universally.

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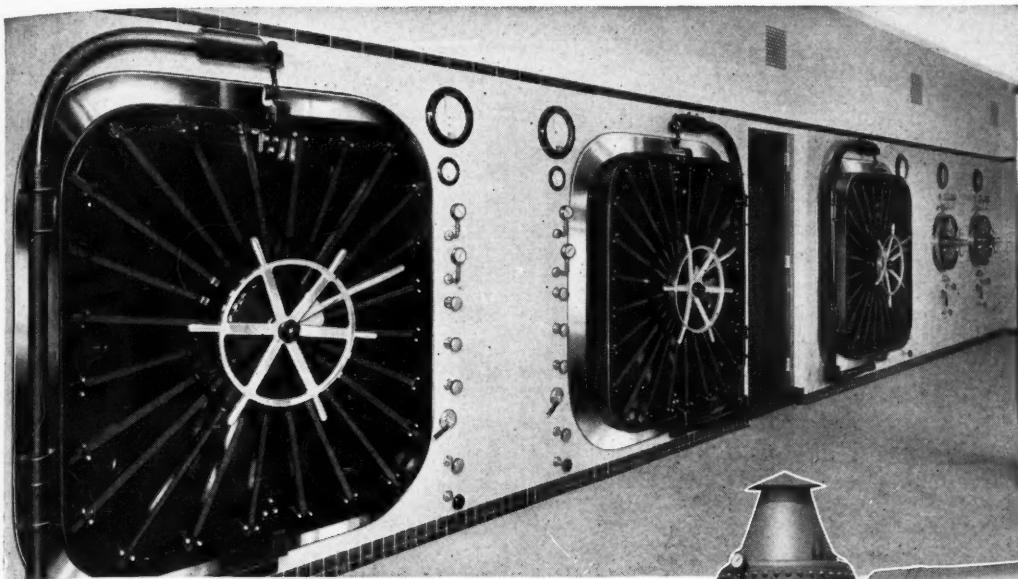
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Vol. 61, N

CLIMAX BULK STERILIZERS



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FOR WAR AND PEACE

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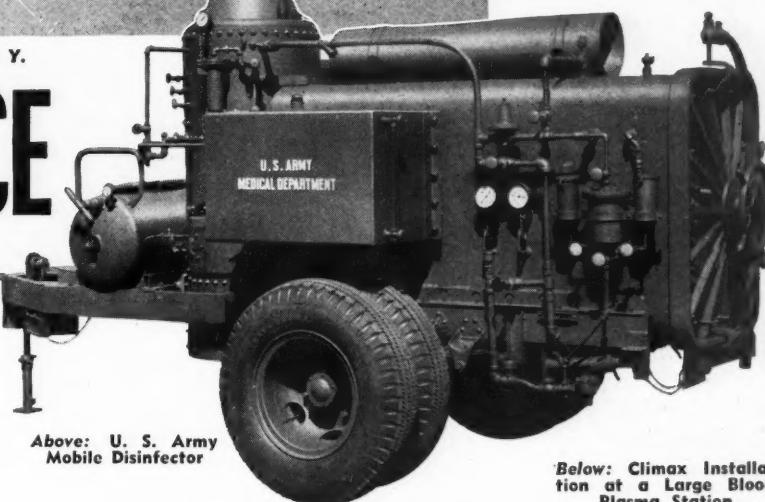
The greatly increased wartime demands of the Army, Navy and Maritime Commission, as well as Lend Lease and the Red Cross, found us ready. Our factories produced sterilizers in volume heretofore considered impossible. As a result we are ahead of war schedules on a number of contracts.

Climax Sterilizers have been leaders in the hospital field since 1898. Many of the world's outstanding hospitals are Climax equipped. We can supply a sterilizer of every size for every need. Our expert counsel and engineering facilities are at your service. We will assist you in preparing WPB applications for priorities. Write us.

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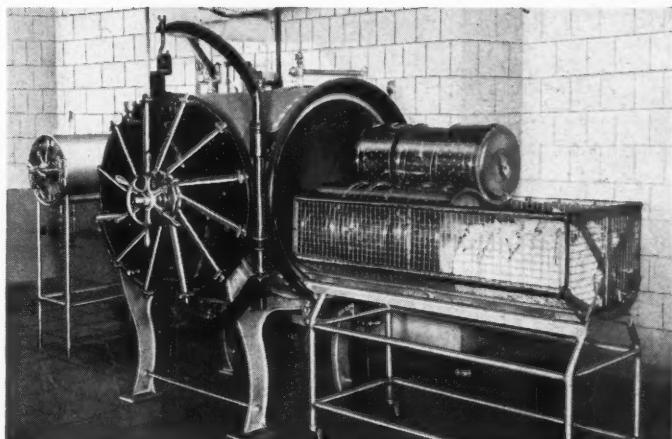
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Above: U. S. Army
Mobile Disinfecter

Below: Climax Installation at a Large Blood Plasma Station



THE HOSPITAL SUPPLY COMPANY

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THE passage of the Bolton Act, which may have important long-range effects on nursing education, furnishes an opportune occasion for us to take a look ahead into both nursing education and nursing service. Such an overview is on the schedule of *The MODERN HOSPITAL* for next month.

EDUCATORS' views of nursing will be presented by the president of an outstanding state university and by the president of a women's college of high standards. Both institutions are now offering nursing education.

THE surgeon general of the U. S. Public Health Service and Lucille Petry, new director of the U.S.P.H.S. nursing education unit, will interpret the requirements of the Bolton Act. Congresswoman Bolton, herself, will discuss the act's broad significance.

TWO hospital administrators, one in charge of a large chain of hospitals and the other superintendent of a small institution, will predict how nurses and hospitals will view each other in the years to come. But the future is conditioned by the present, so the president of the A.H.A. will tell of recent cooperation between nurses and hospitals.

TWO able and ardent spokesmen for nurses will give their points of view on the hospital-nurse relationship and how it can be improved. All in all, we think it will be a distinguished issue.

IN OUR June number we told you about Honolulu's fine blood bank. Now from the opposite direction Boston proclaims that it, too, has one of the finest blood donor centers. A description, with full illustration, will appear next month.

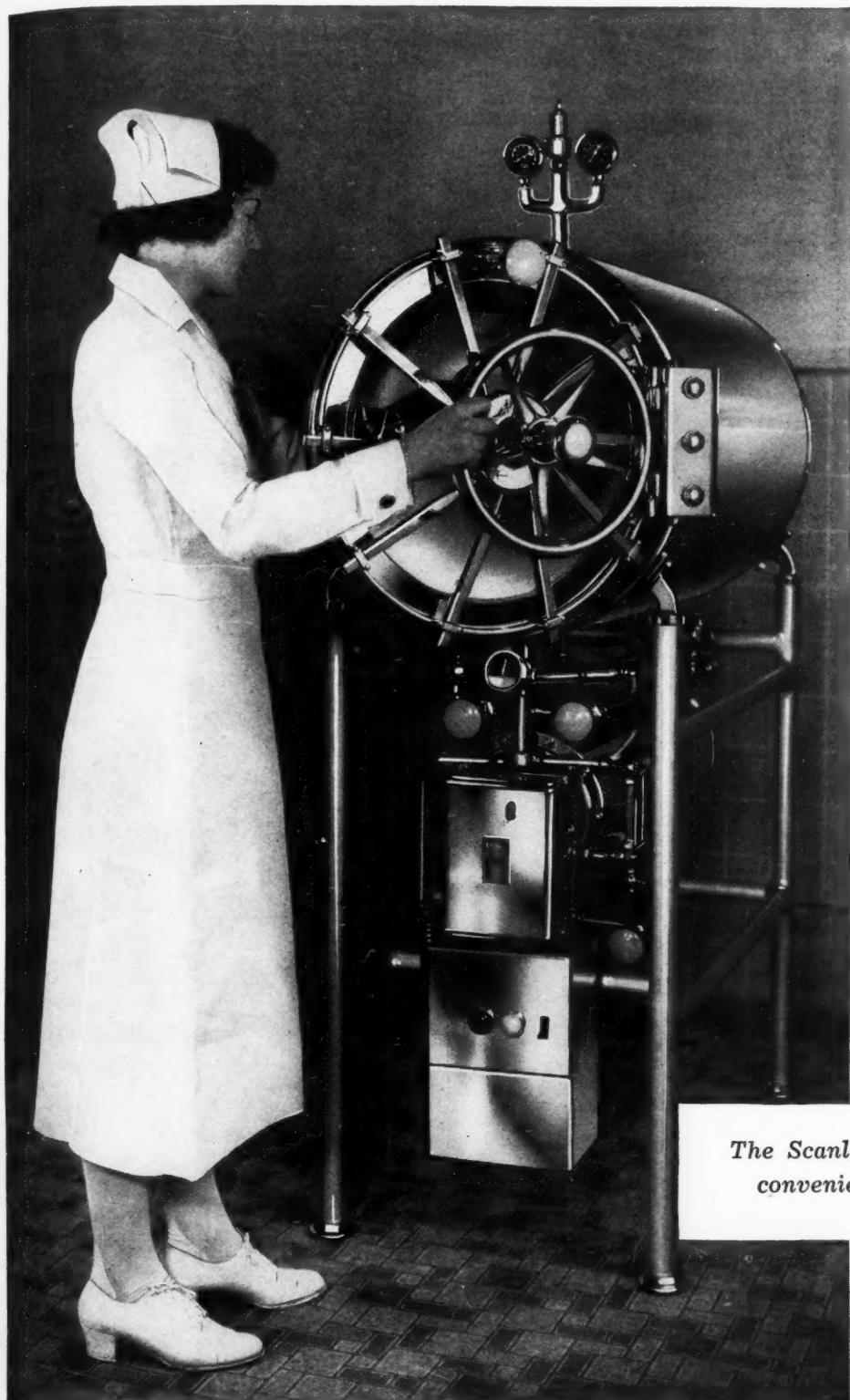
YOU'LL want to know, too, about the national convention programs, which will appear in full next month.

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Published monthly and copyrighted, 1943, The Modern Hospital Publishing Company, Inc., 919 N. Michigan Ave., Chicago (11). Otho F. Ball, president; Raymond P. Sloan, vice president; Stanley R. Clague, secretary; James G. Jarrett, treasurer. North and South America, \$3 a year; foreign, \$4. Single copies: current, 25c; back, 50c to \$1. Entered as second-class matter, Oct. 1, 1918, at the post office at Chicago, Ill., under act of March 3, 1879. Printed in U.S.A.

MODERN EQUIPMENT ..an important aid to hospitals..



Forced by wartime shortages of personnel, materials and equipment, hospital routines are undergoing some decided changes in these days. Out of this experience will doubtless come various improvements that will carry over into the post-war period. Time-saving, labor-saving, serviceable equipment will be one of the important factors in the hospital's plans for the future. Our engineering and planning department will cooperate fully in the care, maintenance and most efficient use of present equipment in the hospitals, and in the preliminary planning for new equipment. Descriptive catalogs are now available relating to:

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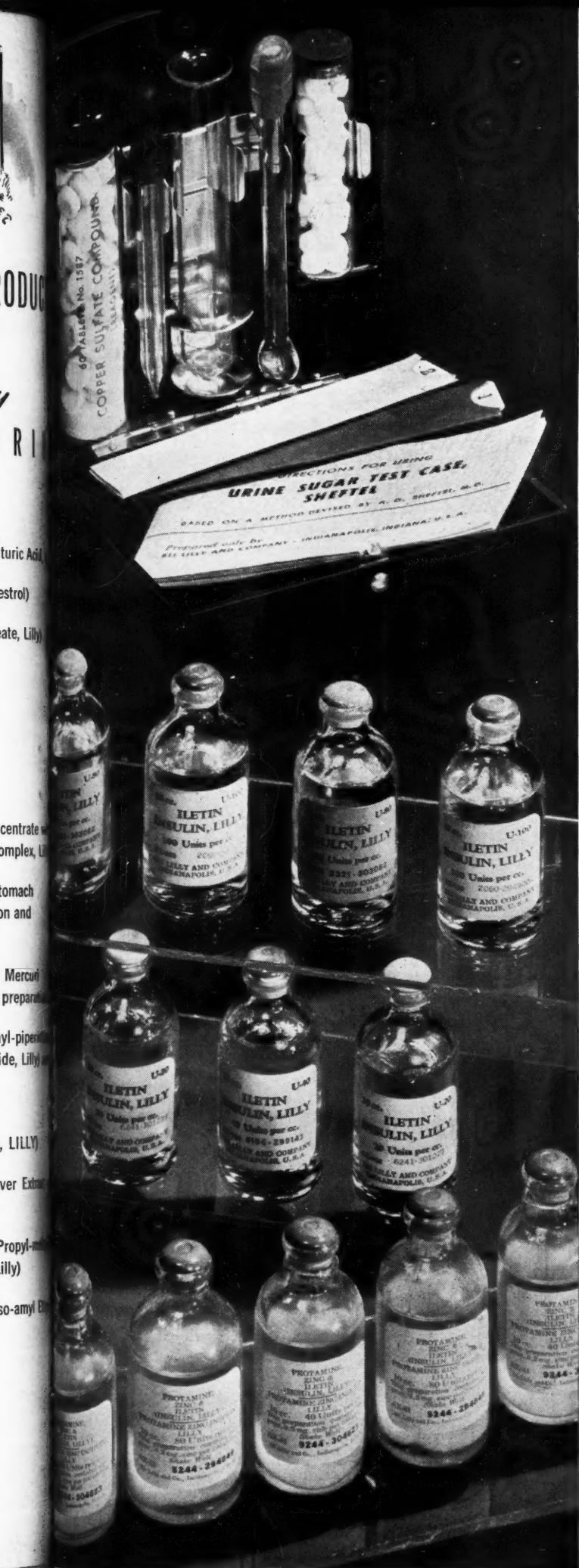
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THE ROVING REPORTER

Problem in Neighborliness

So hospital people think they have their problems! What about this one presented recently to Edgar C. Hayhow in a letter to Paterson General Hospital, Paterson, N. J., from a neighbor who is planting a victory garden?

"My parents own the property adjoining the nurses' home," she writes, "and each year my mother plants various vegetables in our backyard. Last year we had a pumpkin vine that produced seven

large pumpkins in the fall, but it took up so much room it did not give much chance for the other vegetables to grow, so it is unlikely that we can have it again this year unless we can obtain permission to train the vine through the fence so that it can grow in the space between our yard and the nurses' home, on which some flowers grow, but which is not cultivated.

"If this permission could be granted to us, of course we would appreciate it

very much and would be happy in the fall to present the nurses' home or the hospital with a couple of pumpkins."

Employees in the Spotlight

It may be belated but recognition is coming to loyal employees in hospitals everywhere.

Take Grace Hospital, New Haven, Conn., where all employes who have served more than two years at the hospital have their names on an honor roll. The administration, laboratory and maintenance departments have the best record in continuity of service; the dietary and laundry departments have had the biggest turnover.

She Trims Hedges

One seldom reads of a nurse "doing her bit" in war time. What nurses are doing for the war effort can't be couched in lilliputian language. They're "doing their all."

Nevertheless, a surprising number of them find "bits" to do after their strenuous hours are over. Among these is

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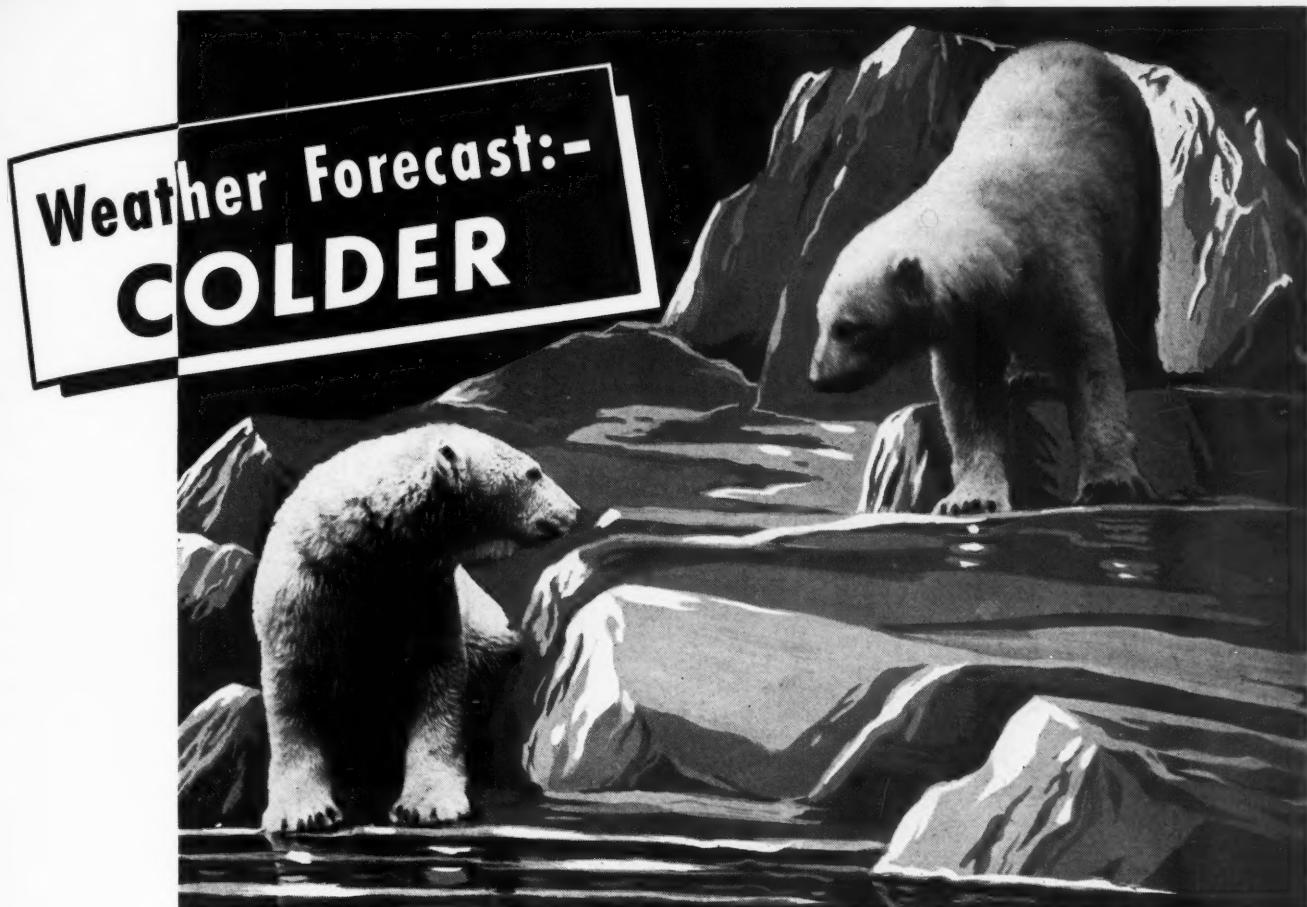


attractive Bess McCormick of the hospital staff at Lake Wales, Fla.

Nurse McCormick, as you can see in the picture, is clipping a hedge. The hedge surrounds the hospital grounds and a very ragged hedge it was, owing to the manpower situation in the community. To Miss McCormick on her day off hedge clipping looked like recreation of the right sort so she has taken on the job.

Where Men Replace Women

Women welders, women riveters, women street car conductors are being encountered on every side. In August



SOME folks may think it funny to talk about blankets in mid-summer . . . but it certainly is not too early to take stock and issue orders against coming requirements, especially in view of war-time conditions.

Government purchases are making it increasingly difficult to secure good blankets . . . and there is no substitute for a good blanket.

May we suggest, therefore, that you cover requirements now for blankets you will need next Fall?

We shall be happy to serve if we can meet your requirements. Please address Department M8.

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1943 they may still be feature material but they aren't news.

We know a hospital that could break into the headlines because it is substituting *manpower* for *womanpower*. The nurse shortage has been dramatized in the press but the Philadelphia story is that surgeons are standing behind the suture tables in the operating rooms at Jewish Hospital handling instruments and selecting the right suture size.

Naturally, the nurse shortage had become fairly drastic before this plan developed. In fact, Jewish Hospital has two plans under which junior surgical staff men supplant suture nurses.

Under plan 1 the visiting surgeon provides an assistant surgeon from his own staff, who is a capable substitute because he is acquainted with his chief's technic and, therefore, is able to anticipate his needs during an operation.

There's a doctor shortage, too, of course, so that this plan is not always possible and assistance must come from other staffs. Under plan 2 this nurse substitute service is done by a group of 10 younger men, some of whom have had the experience during their post-graduate days of serving three months at the instrument table. Those not so experienced are being given practical

demonstrations by the operating room supervisor in draping the patient, handling the instruments and recognizing suture sizes.

Naturally, the general direction of the operating room remains under the eye of an experienced clinic supervisor.

Employes Receive Their "V's"

"I think the American Hospital Association pins to designate hospital workers have just as much value as we ourselves attach to them. By making an important occasion of this award and by wearing the pins ourselves, I think they have had a real significance for our workers."

Dorothy Pellenz, assistant superintendent, Crouse-Irving Hospital, Syracuse, N. Y., is referring to a ceremony that took place at the hospital in connection with its National Hospital Day program. Every employe received one of the "V" pins from Dr. Carl E. Muench, superintendent, and Dr. C. F. Potter, trustee.

At the same time, Doctor Muench read a service roll of honor presenting 15 employes with more than twenty years of service, 21 with from ten to twenty years of service and 24 with from five to ten years of service. Chief speaker of the occasion was Dr. H. O. Brust, vice president of the board of trustees, who described the essentiality of hospital workers in the war effort.

"Sheetless Tuesdays"

It doesn't actually have to be a Tuesday; any other day will suffice so long as on one day each week no linen is forthcoming. Dr. Fraser D. Mooney, superintendent, Buffalo General Hospital, Buffalo, N. Y., hit upon the plan when the hospital was overcrowded with patients and personnel in the laundry was seriously curtailed. Then and there the idea of "skip-a-day" was conceived when no linen is given out for any beds, except in an emergency and when the nurse in charge makes out a written explanation of why the linen is needed; such requisitions go to the superintendent of nurses and then to the matron.

"We now have a 'sheetless' day once a week which includes all bed linen," Doctor Mooney tells us. "The linen is available, of course, to change the bed of a patient who has gone home and for other necessities throughout the hospital. No one is informed which day is chosen until the morning of that day. We have found this allows us to catch up with our back laundry and it also has a tendency to produce and place in circulation that linen which is hidden under the mattress, in the bureau drawers and in many other ingenious hiding places. We have derived much benefit from this and are wondering why we did not think of it sooner."

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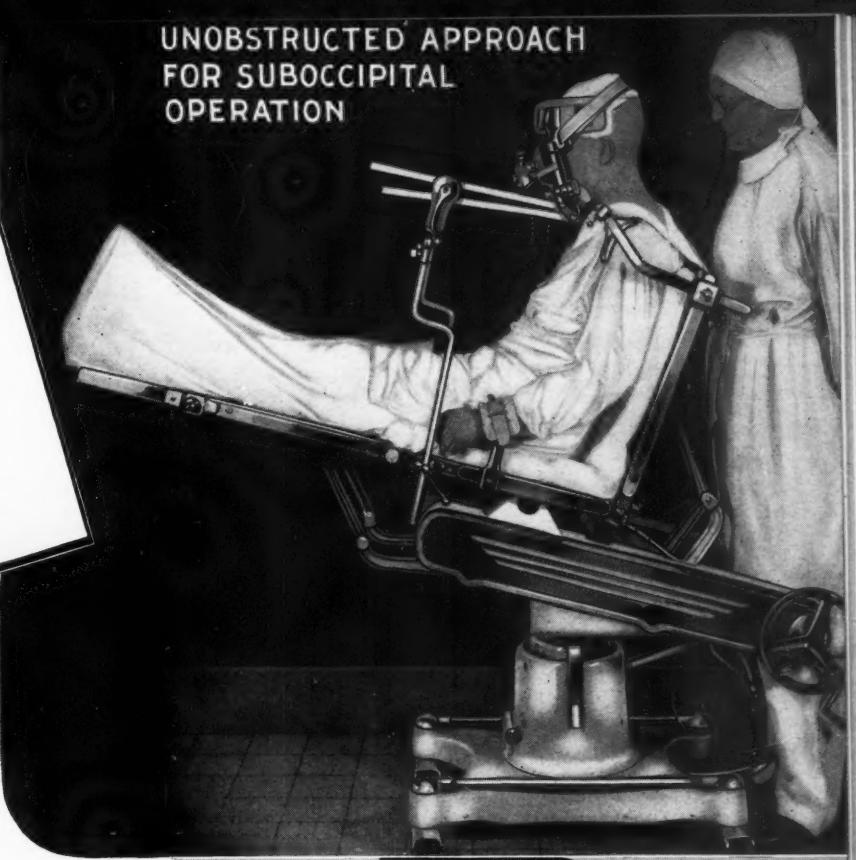
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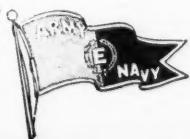
1072-3-4-5, provides an unobstructed surgical approach for operations on the brain and upper portion of the spinal cord with patient in an upright position.

In this position a stabilized blood pressure may be maintained during the operation under general anesthesia, with the lower extremities splinted by application of supportive bandages applied firmly from toe to groin. Postural drainage of cerebrospinal fluid and blood from the wound is assured.

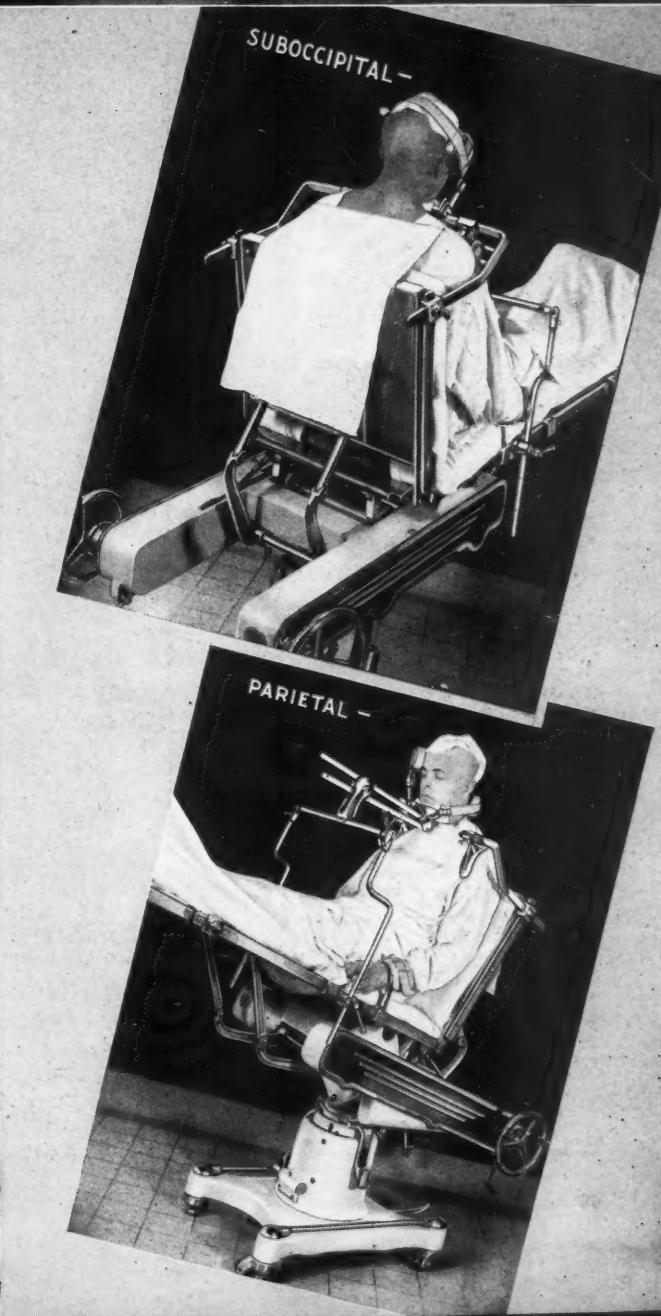
An important feature is provision for removal of either side of head rest to expose parietal area and maintaining immobilization.

Especially designed shoulder braces prevent patient from slumping forward or downward.

* To illustrate the head rest more clearly only partial surgical draping is shown.



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READER OPINION

Standards for New Hospitals

Sirs:

The Sanford-Mills article, "We Can Keep Our Hospitals Voluntary" (July issue) is a very fine presentation.

The fundamental principle of cooperation between government and voluntary hospitals in the care of the sick is commendable. Responsibility of the federal or local governments, without control, is desirable but to have this voluntary hospitals must do their part, that is, go as far as they can in their voluntary effort and if this is not sufficient then the responsibility of the respective governments should be recognized.

The authors infer that we should have a better distribution of hospitals. The further survey they advocate will clear up this matter. Ponton's map shows where every hospital is located, the population served, transportation facilities and other data which might influence the problem of hospitalization in any community.

I am not disturbed with the ratio of 4.5 beds per thousand population. This is ample in the average community today. I wish the article had emphasized the desirability of getting all existing small hospitals up to the proper standard of equipment, organization and functioning. New hospitals should be provided only when minimum standards can be maintained.

Malcolm T. MacEachern, M.D.
Associate Director

American College of Surgeons
Chicago

Working Together

Sirs:

The article "We Can Keep Our Hospitals Voluntary" (July issue) contains a number of worth-while suggestions which the National Commission on Hospital Service might well give serious consideration.

Our National Commission on Hospital Service could render a real service to the voluntary hospitals by gathering such factual data as are essential for enlightened planning, by participating in discussions with such bodies as the National Resources Planning Board and by taking an active part in guiding future plans for hospital service.

Social insurance need not necessarily mean compulsory insurance for all, but it will require a considerable change from present practices as regards hospital services.

Hospitals must work together as never before in developing a service for the entire population of the nation. Governmental assistance in one form or another

will, no doubt, be necessary in many areas. However, a single pattern and a central control, in view of the many existing diverse conditions throughout the country, would not seem to me to be the best solution.

A. C. Bachmeyer
Director
University of Chicago Clinics

Costly Networks

Sirs:

I have read the article "We Can Keep Our Hospitals Voluntary." Frankly, the manner in which the material is presented makes it difficult to grasp what the authors are attempting to establish. More than the first half of the article is devoted to the arguments for government responsibility for hospitals but, in the last few paragraphs of the article, the authors change their theme.

With our transportation system as it is, we need more improvements on the already existing hospitals rather than the establishing of a lot of smaller hospitals, except for emergency stations. The larger centers will still have to train nurses, physicians and technicians for small institutions and, in addition, will carry on research and public educational activities. I cannot see how such a network plan of hospitals would reduce the cost of hospitalization. I feel, rather, that it would increase it.

If the government would subsidize the individual, preferably through Blue Cross, the voluntary hospital system would be strengthened.

Frank J. Walter

St. Luke's Hospital
Denver, Colo.

Blue Cross Policy Approved

Sirs:

I am pleased with your recent editorial policy in support of Blue Cross plans, as well as the whole voluntary approach to the problem of making health services available to the American people. I do not feel that I would be fair to you if I did not state that I feel the magazine suffered because, in my opinion, you were not sufficiently aggressive in supporting voluntary nonprofit plans, particularly during 1941 and 1942.

I sincerely feel that your present policy is sound and you are to be commended by the editorial board for the stand that you have taken. I hope that it may long continue.

John R. Mannix
Director
Michigan Hospital Service
Detroit

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SMALL HOSPITAL QUESTIONS

Is Monthly Inventory Needed?

Question: Should a 50 bed hospital take an inventory monthly?—F.O., Mich.

ANSWER: A physical inventory is not necessary monthly in a 50 bed hospital. A perpetual inventory, however, is just as necessary in a hospital of that size as it is in a large one and a "spot check" should be taken each month so as to have an idea as to how accurate the perpetual inventory is. By this I mean that a half dozen items might be counted to see if the balance on the shelves agrees with the balance on the inventory card.

If it does, it probably could safely be assumed that the cards are being kept accurately. If it doesn't, it would probably be wise to take a physical inventory and see just what discrepancy actually exists. If the records seem accurate, it probably is sufficient to take a physical inventory every six months. The physical inventory is a time-consuming procedure and so should be used no more than is absolutely necessary, especially now while labor shortages are so widespread.

Inasmuch as CMP 5A forbids a hospital to accept shipments that will provide more than a sixty day supply of any particular item, it is more important than ever that perpetual inventories be kept so that a hospital may have proof that it is not disobeying this law.—NELLIE GORGAS.

Duties in a 50 Bed Hospital

Question: What duties should a nursing superintendent assume in a 50 bed hospital other than those of administration?—M.E.L., Ala.

ANSWER: A nurse superintendent should certainly be capable of business management, the purchase of supplies and equipment and the supervision of nursing service. She must have a working knowledge of every department because, from time to time, she may have to assume these responsibilities. There is probably more required of the nurse superintendent of a small hospital than of any other type of worker. It is seldom that she can devote all of her time to administration.—MRS. JEWELL W. THRASHER.

Money's Worth From Rubber Gloves

Question: What is the best method for saving rubber gloves?—D.L.R., Kan.

ANSWER: We may assume that rubber gloves made by reputable manufacturers are purchased, that they are stored in an unheated dry room away from dirt and direct light and, also, that the surgeons and all others using gloves are aware of the necessity for care in their use.

Mend and reuse torn gloves. This work requires patches from gloves be-

Conducted by Gladys Brandt, R.N., Children's Free Hospital, Louisville, Ky.; Jewell W. Thrasher, R.N., Frasier-Ellis Hospital, Dothan, Ala.; William B. Sweeney, Windham Community Memorial Hospital, Willimantic, Conn.; A. A. Aita, San Antonio Community Hospital, Upland, Calif.; William J. Donnelly, Greenwich Hospital, Greenwich, Conn., and others

yond further use and some rubber cement. Patches should extend from $\frac{1}{8}$ to $\frac{1}{4}$ inch beyond the tear in all directions and the gloves should be allowed to dry for a week or two before being returned to service.

Proper sterilization techniques save gloves. Weak solutions (2 per cent) of cresol do not harm rubber and it is permissible, although not necessary, to soak gloves in these solutions for disinfection. They should then be washed in lukewarm water using green soap, making certain that all grease is removed. Rinse well, dry thoroughly and powder inside and out. Wrap in standard double muslin or kraft paper envelopes and autoclave for not more than from fifteen to eighteen minutes at temperatures not exceeding from 250° to 254° F.

Finally, when beyond further patching, the gloves can be sliced across their fingers, palms and wrists to make about 30 or 40 fairly satisfactory rubber bands from each glove. Gloves that are beyond such treatment should be collected and sold as scrap rubber.—MAXWELL S. FRANK, M.D.

Building Up Supplies

Question: What will be the future possibilities of rebuilding a stock of canned goods and other supplies after present stores are used?—W.L.H., Mich.

ANSWER: Under the present system of allotment of point values for a period of two months only, there is no possibility of building up a large supply of rationed goods. Those who have inventories in excess of the current allotment may not be able to buy any stock except on points borrowed against future months. These are granted only in the case of an unbalanced inventory and for the purchase of necessary items.

The reason for rationing is to prevent the buying and storing of large quantities of scarce items by those with sufficient money and storage space, thus

depriving those less fortunate of the opportunity of obtaining necessary supplies.

So far as unrationed items are concerned, building up a stock depends upon the amount available and whether it is sold in unlimited amounts to one customer or prorated on the basis of previous consumption. Many firms try to retain as many of their previous customers as possible by prorating the merchandise available.—ELLA M. ECK.

Orderlies Difficult to Find

Question: Are other hospitals in the South having difficulty securing colored orderlies?—M.L., Va.

ANSWERS: All hospitals in the South, especially those in war plant areas, are experiencing a great deal of difficulty in competing with shipyards and other industries that pay wages completely out of line with the normal peace-time salary scales. In many cases salaries now being paid are as high as 400 or 500 per cent above normal standards. It has been found practical in some instances to replace this type of help with white help from the ranks of older men and high school boys.—A. J. HOCKETT, M.D.

Training Obstetrical Aides

Question: Are hospitals using undergraduates or trained aides on the obstetrical nursing service?—A.R.H., Ohio.

ANSWER: Red Cross volunteer nurse aides are now being permitted to care for obstetrical patients at the discretion of the hospital and with the approval of the Red Cross. A number of good hospitals are assigning aides to this work under graduate supervision.

States have varying regulations. One state requires that 30 per cent of the personnel on the obstetrical service be graduate registered nurses. Some hospitals are employing undergraduate nurses and teaching them this service. The main consideration is that all personnel on the obstetrical service be given thorough instruction and supervision.—ELIZABETH ODELL, R.N.

Compensating for Overtime

Question: Should overtime be made up in extra time off or should employees be paid for overtime?—H.D., N. Y.

ANSWER: Professional employees, such as nurses and laboratory technicians, are usually compensated for overtime work by being given a corresponding amount of additional time off at the convenience of the hospital but within a reasonable period of time. Other employees, such as maids, orderlies and laundry workers, are paid for their overtime work.—GEORGE U. WOOD.

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HEADLINE NEWS

AUGUST 1943

New System for Handling Applications for New Construction Announced

WASHINGTON, D. C.—A new system of handling applications for hospital construction was announced to The MODERN HOSPITAL on July 19 by Everett W. Jones, head hospital consultant of the War Production Board. Mr. Jones has been working on this project for the last five months.

This new system provides a relatively simple preliminary application for all projects costing more than \$2500. When this is filled out, filed and approved, a hospital will know definitely that its proposed project has been declared essential and that priorities will be given before it makes out its W.P.B. Form 617 (formerly PD-200). This will avoid the possible loss of thousands of man hours and dollars in preparing final working drawings and detailed material and equipment lists before final approval had been given by W.P.B., Mr. Jones declared.

The new preliminary application is in two parts, W.P.B.-2814 and W.P.B.-2814.1. The former requires identification data, a brief description of the

construction program, preliminary cost estimates, extent to which public utilities will be affected, whether other construction will be required to put this project into complete operation, the time required for construction and for installing equipment, whether workmen will be available to do the construction, whether materials can be obtained, endorsements of the project by government and other agencies, and other applications already filed on this project.

Form W.P.B.-2814.1 deals with the need for the project. In addition to preliminary plans or rough sketches, it requires answers to the following questions:

Furnish the following information regarding present facilities:

1. Number of beds and bassinets now installed: total, obstetrical, neuropsychiatric, tuberculosis, contagious, new-born.
2. By placing additional beds in private and semiprivate rooms and wards and by utilizing visitors' rooms and other convertible space, not covered in No. 3 below, without reducing floor area per bed below approximately 75 square feet, give number of beds and bassinets which

(Continued on page 130)

800 Ambulances to Be Distributed to Some Cities in Target Areas

By EVA ADAMS CROSS
Washington Representative, The MODERN HOSPITAL

WASHINGTON, D. C.—James M. Landis, director of civilian defense, on July 12 announced plans for distribution of 800 four-stretcher ambulance bodies to cities in target areas. Most American cities, said Mr. Landis, have insufficient ambulances to meet emergency demands in the event of an enemy attack. These ambulance bodies are to be mounted on the chassis of used passenger cars.

Made of noncritical materials, the ambulances are roomy enough to carry four stretchers on built-in racks and still leave space behind the stretcher rows for an attendant to ride with the casualties and give necessary care en route. The O.C.D. ambulance body, approved by the Corps of Engineers, U.S.A., can be mounted on the rear portion of the chassis of a Ford, Chevrolet or Plymouth four door sedan, models 1939 to 1941, after the part of the body behind the front seat has been removed.

In the majority of communities, E.M.S. is at present relying on the type of ambulance available before the war and such additional small vehicles as service wagons, panel trucks and taxicabs which have been volunteered. The use of this type of vehicle, pointed out Mr. Landis, leads to traffic congestion in disasters involving many casualties, thus defeating the purpose of speeding victims to hospitals. The four-stretcher ambulances will be parked at hospitals and will be available for immediate use day or night.

The ambulance bodies will be distributed free of charge by O.C.D. to selected communities, but because of the limited number available, will be sent only to cities in exposed areas and then only after the city has notified O.C.D. that the chassis on which to mount them will be furnished. Allocation of ambulance bodies has been made on the basis of population of cities in target zones, with consideration of special transportation problems, number of four-stretcher ambulances already available, special war hazards and the needs of smaller exposed communities.

Hospitals Protected in Obtaining Textiles, Everett Jones Told

WASHINGTON, D. C.—Everett W. Jones, hospital consultant, W.P.B., was assured July 1 by an official of the textile division, W.P.B., that "We expect the mills to take care of hospitals ahead of regular domestic users even though no ratings attach to their purchases."

The new Textiles Order M-328 had been in effect for thirty days when the reassuring statement concerning the protection of hospitals was made. M-328, issued June 1, restricted the use of preference ratings for distribution of textile products to the most essential purposes and eliminated their use for all other purposes.

In a statement to Mr. Jones, July 13, the same official of the Textiles Branch said, "Whereas, we do not want to make the assertion that bed linen and towels are readily available in the market without preference ratings, we are striving to minimize the number of ratings being given for material of this type and as soon as existing unfulfilled military procurements are out of the way, we believe that the normal distribution of goods will again be resumed to a considerable extent. Naturally, in a time such as this, we cannot give assurance to any user that his full requirements will at all times be met.

"We are amending Order L-99," the spokesman continued, "to provide that hospital use is one of the several to which the delivery of muslins must be confined. This ought to aid hospitals considerably insofar as draw sheets and patients' gowns are concerned."

Commenting on this statement, Mr. Jones said that any hospital unable to meet its minimum essential requirements without a rating can file PD-1A for a rating.

Frank Given New Appointment

WASHINGTON, D. C.—Appointment of Howard H. Frank as deputy director of the Safety and Technical Equipment Division was announced June 30 by John J. Hall of W.P.B. Mr. Frank joined the Office of Production Management in August 1941 and has been with the Safety and Technical Equipment Division since February 1943. Before coming to Washington he was special agent for the Prudential Insurance Company.

Advisory Committee on Nurse Training Program Holds First Conference

By EVA ADAMS CROSS
Washington Representative, The MODERN HOSPITAL

WASHINGTON, D. C.—A first conference was held in Washington on June 25 of the advisory committee for the government nurse training program, with James A. Hamilton and Rev. Alphonse M. Schwitalla representing the hospital field.

Under the administration of the U. S. Public Health Service, the program developed from the Bolton-Bailey Act providing for the training of nurses for the armed forces, governmental and civilian hospitals, health agencies and war industries through grants to institutions giving such training.

The Public Health Service proposes to carry out the program by establishing the United States Cadet Nurse Corps. The student nurses are to be provided with a distinctive uniform and insignia; the government will supply their room, board, tuition and fees with accredited nurse training institutions. In addition, they will be paid a monthly stipend.

Student nurses will be made available for full-time nursing practice under supervision during the last twelve or six months of their training (the cadet period) in approved civilian or military organizations. Courses of study and training must meet standards prescribed by the surgeon general after consultation with the advisory committee.

Meeting with the committee in its first conference were Mrs. Frances P. Bolton, Paul V. McNutt, Dr. Thomas Parran, who is the chairman of the advisory body, and members of his staff.

Members of the committee, in addition to Mr. Hamilton and Father Schwitalla, are: Margaret Tracy, director of the school of nursing, University of California; Anna D. Wolf, director of the school of nursing, Johns Hopkins Hospital; Dr. Oliver C. Carmichael, president, Vanderbilt University; Sister Helen Jarrell, dean, St. Bernard's Unit, Loyola University School of Nursing; Isabel M. Stewart, director of the division of nursing education, Columbia University; Marion Howell, director, Frances Payne Bolton School of Nursing, Western Reserve University; Dr. Hyrum Leo Marshall, University of Utah.

Committee members discussed policy issues of the nursing corps and sketched campaign activities. Though no specific announcement has been made, sufficient funds to carry on the program are available. It has been estimated that the cost will be about \$64,000,000 a year.

An apparent lag in the recruitment drive was disclosed by Lucile Petry, di-

rector of the new Nursing Education Division, U. S. Public Health Service. Fewer than half as many inquiries by prospective trainees came to the National Nursing Council for War Services in March, April and May as in the previous three months, declared Miss Petry.

Most Student Nurses Will Join Cadet Corps, U.S.P.H.S. Prophesies

WASHINGTON, D. C.—That a large proportion of the 100,000 student nurses now in schools of nursing will join the newly created U. S. Cadet Nurse Corps was the forecast July 13 of the Division of Nurse Education, U. S. Public Health Service, under which the corps will be administered. Descriptive placards and educational leaflets on eligibility of students are being mailed to directors of all schools of nursing.

A copy of the Bolton Act and "Regulations of the Surgeon General Governing Payment to Provide Training for Nurses" have been mailed to the following: directors of state approved schools of nursing in the United States; administrators of hospitals with which nursing schools are connected; state boards of nurse examiners in states and territories; national, state and local nursing councils for war service; presidents of national, state and local leagues of nursing education; presidents and executive secretaries of national and state nurse associations, and national and state organizations of public health nursing.

A limited number of additional copies is available upon request to the Division of Nurse Education, U. S. Public Health Service, Washington 14, D. C.

Stop Enrolling Lay Administrators

WASHINGTON, D. C.—Enrollment of lay hospital administrators in the Army will stop shortly because the maximum number needed has almost been reached, it was announced during July. To date, 265 lay administrators have been commissioned. All have gone through the basic training at Carlisle Barracks or at the Medical Replacement Training Centers: Camp Pickett, Va.; Camp Grant, Ill.; Camp Barkley, Tex., and Camp Joseph T. Robinson, Ark. Some have taken additional schooling at Army General Hospitals.

Army Nurse Corps Sets Forth New Procedure for Appointing Nurses

WASHINGTON, D. C.—A new procedure for procuring and appointing nurses in the Army Nurse Corps was announced on July 16 to the Washington representative of The MODERN HOSPITAL by Col. Florence A. Blanchfield, superintendent of the corps.

Nurses may now apply for appointment to the surgeon general's office, the commanding generals of the service commands, the chief of the Army Air Forces or the officer procurement field services. They will be interviewed and given application blanks.

Even though they do not wish to enroll in the American Red Cross, the credentials of all applicants will be evaluated by the Red Cross and certified to the appropriate Army officer for appointment.

"By collecting and evaluating the credentials, the Red Cross Nursing Service relieves the medical corps of the Army of a tremendous load of clerical work," Colonel Blanchfield pointed out. "Further, through this arrangement, one board passes on all credentials thus assuring a more uniform evaluation and closer adherence to the standards set by the surgeon general."

Nurses applying for Army appointment may indicate that they also desire enrollment in the Red Cross or that they prefer only Army appointment. Those entering the Red Cross receive cards and pins without delay.

Colonel Blanchfield also announced that the various Red Cross chapters have been reorganized to include the Red Cross Nursing Committee, thus placing at the disposal of the committee all of the facilities of the chapters.

Cancel Meetings, O.D.T. Urges

WASHINGTON, D. C.—A renewed plea by Joseph B. Eastman for the cancellation of all conventions and similar gatherings was made public on July 15. Convention travel, Mr. Eastman said, is interfering with military and essential war business travel. "Many organizations doing important war work have found in the convention-by-mail a satisfactory war-time alternative for the regular annual meeting. Each organization must make its own independent decision. O.D.T. cannot pass upon the essentiality of any proposed meeting. Officers and members should answer conscientiously the question whether cancellation will not accomplish more for the war effort than anything that can be gained by holding the convention."

LOOKING FORWARD

The New Wagner Bill

HERE are many things in Senator Wagner's new bill to expand the social security program that deserve the warm support of the hospitals of the United States. Among these are the long overdue extension of social security protection to the employes of voluntary hospitals and other nonprofit corporations; the provision without charge of benefits for members of the armed forces; the inclusion of permanent and temporary disability insurance and of maternity benefits, and the development of a unified public assistance system which includes medical and rehabilitation service, with the federal government assuming from 50 to 75 per cent of the cost.

These programs are in the public interest and should be supported vigorously by voluntary hospitals.

In Title IX, however, the senator proposes to set up a federal system of medical and hospital benefits.

The basic question is: Do we at this time need to adopt a federal system of medical and hospital care? Advocates of such a system quite consistently seek to avoid debate on this question. They prefer to talk about the specific details of such a program and to assume that the basic question has already been settled in favor of federal intervention.

If it is now necessary to have such a federal system, it is apparent that the one proposed is reasonably good. One might suggest certain changes in details but its general outlines improve upon previous proposals and some latitude is left for experimentation.

As was stated in this magazine last month, hospitalization within the means of all who need it concerns all the people and has a direct bearing on the health of the nation and, hence, upon its welfare. Thus, "responsibility for health lies squarely with the federal government."

This responsibility does not necessarily imply that the government must operate the hospital system. The government must see that the hospital system is operated for the best interests of all the people. If, however, this can be done by voluntary effort, the resulting freedom to experiment, the opportunity for continued advancement and the increased emphasis on self-reliance all strongly indicate that the voluntary program should be given an opportunity to develop.

Through Blue Cross plans, the hospitals of the United States have provided protection to nearly 12,000,000 people; another 4,000,000 are protected by commercial plans. Blue Cross protection is now as good and as inexpensive as the proposed federal pro-

gram would be. While present enrollment is only one tenth of what the plans hope to attain, it is a creditable showing.

The experimentation and development in Blue Cross plans that are taking place now give promise of much faster growth in the next five years than there has been in the last ten. The new comprehensive uniform national contract, new methods of enrolling and servicing contracts, increased emphasis on the enrollment of the self-employed, farmers and others now customarily excluded from protection, better cooperation between member hospitals and Blue Cross plans, proposals for cash surgical indemnity plans and other recent developments are of great significance.

For the next five years or so, the Congress and the administrative agencies of the federal government should encourage the development of Blue Cross plans. If at the end of that time it is clear that the plans do not and cannot meet the needs of substantially all of the self-supporting population, the Congress would be entirely justified in passing Title IX of Senator Wagner's bill.

Surely, this is a reasonable and proper request to be made of a people's government by Blue Cross plans which have been described as a unique product of the American ideal of public service under private leadership.

Reactionaries in the Saddle

HOSPITALS are now confronted in the Wagner Bill with the most critical problem they have ever faced. If the federal government steps in to provide full hospital and medical benefits under the Social Security Act the whole character of the voluntary hospital will change. The Social Security Board and the U. S. Public Health Service, whether they now admit it or not, would, in fact, control the voluntary hospitals. Their slightest wish would be our command.

At this crucial stage when every effort should be concentrated upon the rapid and sound development of Blue Cross plans so that federal control of hospitals will be unnecessary, some extremists in the American Medical Association house of delegates (we hope they constitute only a minority) have chosen to attack the American Hospital Association and the Blue Cross plans. Waving the now tattered flag of "hospitals practicing medicine" and of "exploitation of radiologists, pathologists and anesthetists," they urge the A.H.A. to withhold approval of the uniform comprehensive Blue Cross contract and to eliminate the serv-

ices of these specialists from present contracts, thus reducing the value of Blue Cross protection.

They go further and propose to upset the established administrative organization of hospitals when they declare that "in the relationships of the medical staff and the board of directors of a hospital there should be no intermediary. The staff should have direct access to the board." The purpose of this statement, apparently, is to reduce the hospital administrator to a mere hotel keeper having no concern with the most important aspect of hospital work, the medical service to patients.

It is significant, of course, that these reactionary resolutions were adopted by the house of delegates during war time when the younger, more progressive and generally better educated section of the medical profession was absent in the service of the nation. Furthermore, it has been reported that the A.M.A. trustees do not subscribe to these sentiments.

The hospitals of America are not going to tie their kite to the tailstrings of the reactionary element of the medical profession. Already this element has largely lost the confidence of the public on medical-economic matters. Likewise, it is not trusted by leaders of government.

The time must come shortly when the more intelligent doctors in the American medical profession will assume their proper leadership. In the meantime, hospitals and Blue Cross plans must go forward serving the public in newer and better ways, serene in the confidence that sooner or later the majority of the medical profession will thank them for a progressive and socially-minded program that offers the greatest hope of avoiding federal control of hospital service.

Our Federal Hospitals

THIS issue contains a portfolio describing and illustrating the work of our various federal hospitals. Uncle Sam is now the largest operator of hospitals in the country.

We can be proud of the medical and hospital record of the armed services in the present war. Unlike the situation in World War I, they were ready with plans, tables of organization and lists of all needed equipment. New hospitals were erected with a speed that startled us all and have functioned effectively under widely varied conditions. The death rate of less than 3 per cent among wounded men is considered phenomenal.

While much of the work of federal hospitals is concerned only with war-time needs, other aspects are of great significance to the peace-time hospital program of this nation. Thus the functions of the Veterans Administration, the U. S. Public Health Service, the Indian Service and others go steadily forward.

In 1927 the American Medical Association listed 60,444 hospital beds under federal control and in 1943 stated that the number had grown to 220,938. Only part of this expansion is temporary; the remainder may have far-reaching effects on voluntary hospitals.

Alcoholism and the Hospital

THE American Hospital Association has undertaken a survey of hospital facilities for the alcoholic patient under a grant by the Research Council on Problems of Alcohol, a subsidiary of the American Association for the Advancement of Science.

The sponsorship of this project and the eagerness of our association to see the matter through to a successful conclusion augur well. The committee welcomes any constructive help that may be offered and apologizes in advance for placing another questionnaire on the desk of the harassed hospital executive at this time.

The war has undoubtedly brought this problem into bold relief. We have declined to dignify primary alcoholism as a disease worthy of study and intensive care over a long period of time. This may be due partly to our preoccupation with the acute phases of disease and our traditional tendency to withdraw from its chronic phases.

It may also be due to an ill-advised extremist attitude on a high moral basis, which has been handy as an alibi. In days of peace when our routine was disturbed by this problem only occasionally and when we felt that we could deal with it satisfactorily on a palliative basis, there did not seem to be a compelling reason for a more analytical approach. The community made no particular demands on us and so we were content to concentrate our efforts more worthily, as we thought.

The sobering-up treatment in the emergency room, which was apparently the limit of our interest in primary alcoholism, was symptomatic treatment based on a snap diagnosis. It was often faulty, hurried, haphazard and, above all, superficial in method and results.

Now comes the war, and with it a suspension of moral values on the part of some of weak character. There seems to be more urgency about the problem of primary alcoholism than ever before, and this is due in part to the spread of the habit among adolescents. In World War I we thought that we could solve this problem by stern prohibition which, however, ultimately caused other moral values to shrink. Obviously, the problem has not been solved at all. We shunned it as if it had literally been reeking with alcohol. Now it is back again worse than ever.

At such a pass, the hospitals have an obligation to society that can no longer be ignored. We must analyze the problem down to its roots. We must ascertain what, if anything, is being done by hospitals and similar institutions at the present time to provide the necessary facilities to cope with this malady. What are the medical schools teaching their students? What is the literature on the subject? How much research is being done in the field of alcoholism in its relation to hospitalization? How many beds do we provide for this peculiar condition and how do we use them? Do our facilities for diagnosis and therapy reach out to the alcoholic on the same scientific basis that they do to the sufferer from any other disabling disease? What are the answers to these questions and what shall we recommend?

Air Ambulance brings them back ALIVE

Lt.-Col. R. T. STEVENSON

School of Air Evacuation
Bowman Field, Ky.

ONE of the outstanding medical developments of this war has been the successful and routine practice of evacuation by air of front-line casualties, the sick and wounded. The organization of air evacuation for the United States forces dates from May 1942, when this service was activated.

A few actual incidents illustrate the important rôle that air evacuation is playing in this global war.

In New Guinea, travel by foot or on pack animals over the treacherous trails of the Owen Stanley Mountains from the fighting front to field hospitals is approximately a three weeks' journey, but this same evacuation can be effected by air ambulance in less than one hour. Needless to say, all casualties in this area have been evacuated by air.

A second illustration concerns a private critically injured on the Indo-China front. Exactly eight days after leaving the field hospital in this sector, this man was being cared for in a large Army hospital in the United States. The same trip by land and sea would have taken approximately three months, under present conditions.

Some men wounded in distant battle fields have reached the United States more rapidly than the reports of their having been wounded. A severely injured soldier was transported home for treatment from Egypt by ambulance plane in a matter of seventy-two hours; others have been flown to this country from the Far East, India and Africa.

By saving hours and days of travel time, the care demanded in each individual case can be instituted sooner. This means of transfer of patients



Official photographs, Army Air Force, by Base Photo Section, Bowman Field, Ky.

Air evacuation nurse at Bowman Field, Ky., supervises the loading of an "injured" man, as part of training course.

also boosts their morale, for they know if they are sick or wounded that expert care is only a short distance away by air. Readers who may have relatives in the combat zones in foreign fields can take comfort from this development.

Air evacuation has been practiced in experimental form for many years, but it is only within the last year that a full-time School of Air Evacuation has been set up in the United States to train and organize personnel for this special mission in the forward zones. Graduates of this school are at work today in every theater of operations, saving lives and reducing disabilities through a technic which seems spectacular to the layman but which is grounded in the most careful research into medical and aerial factors involved.

The Army Air Forces School of Air Evacuation is operated by the I Troop Carrier Command; this school is located at Bowman Field,

Ky. Air evacuation and transportation of fighting forces by troop carrier and air transport command planes are an interlocking operation; the big cargo transport planes carry forward men and supplies and evacuate casualties on the return trips. The troop carrier planes, which the Army calls C-47's but which are familiar to civilians as Douglas airliners, carry forward what is known as a flight team, the basic unit of air evacuation—the flight nurse and the medical staff sergeant.

Upon arrival at a loading station, a temporary shelter near the forward lines where casualties have been taken, troops and combat equipment are quickly unloaded and the plane is converted into a flying ambulance. This is done by two simple steps: (1) snapping back against the wall the two long rows of folding seats, and (2) pulling down from the ceiling, where they have been fastened out of the way of the troops, the

U. S. ARMY AIR FORCES

lengths of sturdy webbing clamped to ceiling and floor and made taut with metal fastenings; these serve as the framework for the tiers of litters to be loaded on the plane. Though light, these web type of fastenings are amazingly strong; one pair of straps will sustain 1000 pounds of weight, far more than their maximum load of three litters and three patients.

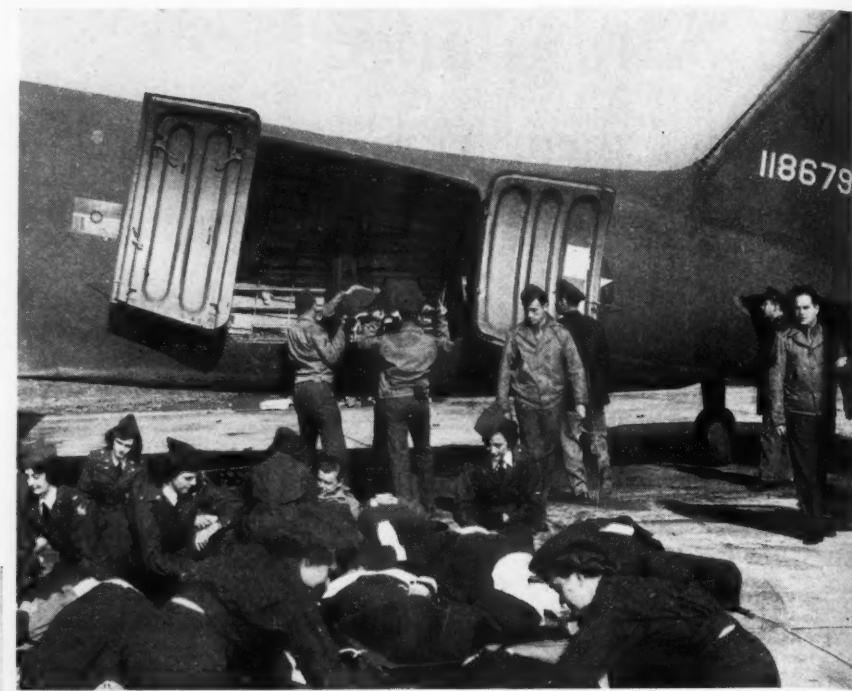
The actual work of loading is done by a group of specially trained enlisted men known as a loading team.

The "patient" is received by two men who are experienced in securing the litter to the fittings.



The most serious cases are loaded first, close to the front of the plane, where they will have the advantage of the minimum sway in flight. In planes of the C-47 type, three tiers of litters may be loaded on each side, making a total of 24 litters in all; and additional patients may also be placed in the aisles, although this complicates the work of the flight team in caring for patients.

Careful research has determined the capacity load for each type of plane, and every inch of space is utilized. The only equipment for which room is reserved is a small medical chest, about the size of a suitcase, containing essentials, such



Flight nurses prepare "patients" for the ambulance trip while surgical technicians load the plane.

as bandages, stimulants, sedatives and blood plasma. Hot cups with which to prepare liquids for patients and chemically heated pads to counteract the chill of high altitudes are available.

Once in flight, the nurse is the officer in charge of the patients. It is for this reason that applicants are so carefully selected for training in the Army Air Forces School of Air Evacuation. A nurse must first of all meet the requirements of the Army Nurse Corps. She must then volunteer for specific assignment to air evacuation training. She must meet certain requirements as to age, physical qualifications and weight,

again with a view to saving precious pounds and inches in the plane.

The nurse selected undergoes one of the most highly specialized training courses in the world. Since she does not know to what corner of the world her assignment may lead her, she studies both tropical and Arctic medicine. Because high altitude may drastically affect both a patient's condition and the normal reactions to medication, she studies aero-medical physiology, aero-medical nursing and aero-medical classification, the last-named in case she, rather than a flight surgeon, is called upon to choose the patients who will benefit most from air evacuation and who can be safely transported. She spends much time practicing loading and unloading, learns crash procedure and how to live under Army conditions—gas mask practice, bivouacs and regular work on the drill field and athletic ground.

The nurse who is graduated from the Army Air Forces School at Bowman Field is probably one of the best qualified women to meet the emergencies of medical care in modern warfare. And the air evacuation of today points the way to even greater modern miracles in aviation medicine tomorrow.

A Hotel Makes Good As a HOSPITAL

COL. DAN C. OGLE

Surgeon, Army Air Forces Regional Station Hospital
Coral Gables, Fla.

THE establishment of military hospitals by hotel conversion is a sound, economical, practicable and relatively rapid procedure. However, it is not ideal and, in the case of station hospitals, is applicable only where a suitable and available hotel is located in the proximate area of the troops to be served or, in the case of general and special hospitals, has a desirable geographical location.

Hotel conversion for civilian hospitals should be feasible and would provide much-needed community hospital beds in selected cases.

The data on the following pages deal with the military hospital but emphasize the salient points to be considered in any type of hotel conversion without attempt at detailed

solution of all problems as these are too variable. Each heading and subparagraph presents a specific problem requiring a definite answer necessary for a comprehensive survey of hotel conversion.

The experience background of this outline is based on a critical

The Army Air Forces Regional Station Hospital located at Coral Gables, Fla., formerly the Miami Biltmore Hotel.

survey of 12 large hotels with from 250 to 500 guest rooms, numerous smaller hotels, the actual and complete conversion and operation of two all-purpose hotel-hospitals totaling 1700 beds and the partial conversion and operation of five hotel-hospital units totaling an additional 1700 beds. Additional experience was gained by assisting with the planning of two other complete hotel conversion projects which together totaled 1500 beds.



U. S. ARMY AIR FORCES



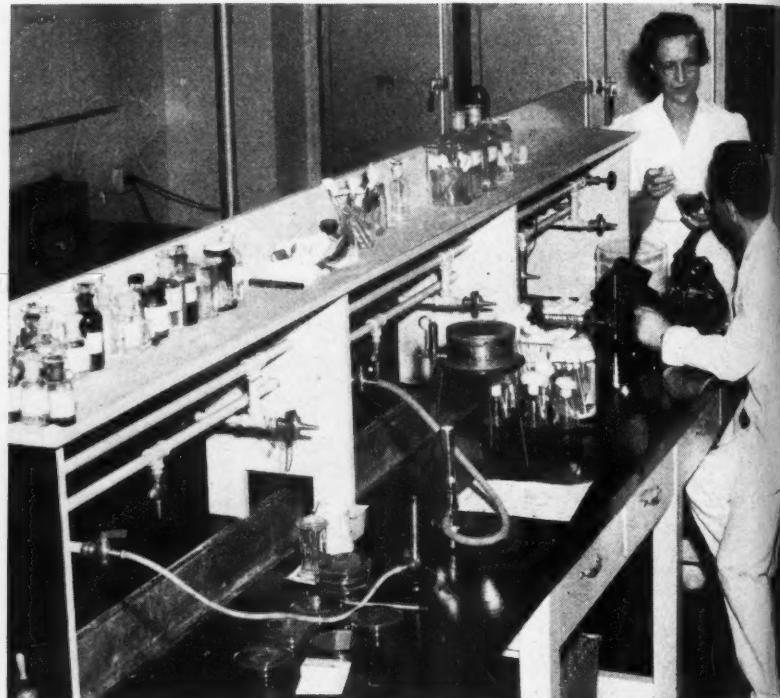
MAIN MESS HALL



CONVALESCENT PARLOR



PHARMACY



SECTION OF LABORATORY

These photographs show examples of alterations and clinical installations at the Station Hospital at Coral Gables, Fla. This institution approaches the ideal in converted hotel installations and is now functioning as an all-purpose hospital, with a highly specialized staff of Army Air Force medical officers, nurses, administrative officers and maintenance personnel. The hospital is almost adjacent to the

first port of entry for air borne casualties using the South Atlantic and Caribbean routes and serves as a reception hospital for air evacuation over these routes. Special recreational facilities, consisting of tennis courts, swimming pools, golf courses and athletic fields, plus the climate, make it ideal for rehabilitative purposes. All photographs by Army Air Forces Technical Training Command.

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Vol. 6

U. S. ARMY AIR FORCES

Problems to Be Considered in Converting Hotels to Hospitals

ESTIMATING REQUIREMENTS

1. Troops or area to be served: (1) Numbers to be served. (2) Duration of encampment. (3) Probability of expansion of area.
2. Estimate of number of beds required.
3. Type of hospital and clinical facilities required.
4. Survey of other hospital installations: (1) Availability of evacuation or general hospitals. (2) Availability of other federal or civilian hospitals.

SELECTING A SUITABLE HOTEL

1. Location relative to troops served.
2. Local transportation facilities.
3. Problems of acquisition: (1) Ownership. (2) Attitude of owners. (3) Decision as to lease or purchase, based on relative economy and estimated time of occupancy as a hospital.
4. Location relative to community: (1) Neighborhood (attitude of local residents; noise features affecting patients; regional traffic; objectionable or dangerous surrounding installations). (2) Housing for military and civilian personnel.

ADAPTABILITY OF STRUCTURE

1. Size with regard to beds and facilities required.
2. Uniformity and adaptability of guest floors: (1) Consistent floor plan throughout.
3. Approaches: (1) Ambulance and service entrances.
4. Public space: (1) Offices (administrative and professional). (2) Special clinics (dental; x-ray; out-patient and consultation; receiving; laboratory; eye, ear, nose and throat; urology and other genito-urinary; physical therapy; pharmacy; orthopedic shop; surgical suite; emergency treatment; central supplies). (3) Medical and other warehouse space. (4) Mess storage. (5) Recreation—American Red Cross, special services. (6) Post office. (7) Message and information centers. (8) Convalescent and expansion wards. (9) Linen storage and exchange. (10) Post Exchange. (11) Chapel.
5. Messing facilities: (1) Kitchen (size and equipment; refrigeration; food preparation). (2) Dining room (size; adaptability for mess traffic; problems of serving). (3) Dishwashing facilities. (4) Garbage storage and disposal.
6. Guest rooms: (1) Size. (2) Uniformity. (3) Ease of entrance. (4) Ease of supervision. (5) Type of bath and toilet.
7. Corridors: (1) Width. (2) Visual or traffic obstructions.
8. Elevators: (1) Size. (2) Safety. (3) Arrangement. (4) Capacity. (5) Estimate of traffic requirements.

AUXILIARY BUILDINGS AND GROUNDS

1. Expansion of facilities.
2. Housing for nurses.
3. Housing for medical detachment: (1) Barracks. (2) Recreation. (3) Unit supply. (4) Bathing and toilet facilities. (5) Ventilation. (6) General comfort.

4. Recreational and rehabilitative facilities: (1) Convalescent training. (2) Theater. (3) Chapel.
5. Protection and guard problems.
6. Maintenance shops: (1) Carpenter. (2) Electrical. (3) Engineer. (4) Plumbing.
7. Terrain features: (1) Drainage. (2) Soil. (3) Grounds, care problems.
8. Special features: (1) Ice plant. (2) Laundry. (3) Auxiliary or emergency electrical power.

STRUCTURAL SOUNDNESS OR ENGINEERING FEATURES

1. Type of construction. (1) Age of building. (2) General condition.
2. Heating and plumbing: (1) Type of boiler plant (high or low pressure; condition of plant). (2) Service plumbing. (3) Accessibility of risers and vents. (4) Adaptability for all utilities.
3. Sewerage disposal: (1) Type. (2) Capacity. (3) Safety.
4. Safety factors: (1) Fireproof construction. (2) Fire safety factors (fighting apparatus; alarm system; water supply; sprinkler system; fire escapes and stair wells).
5. Electric wiring and power: (1) Voltage and current type. (2) Source. (3) Safety. (4) General condition. (5) Adaptability for requirements. (6) Dependability. (7) Auxiliary or emergency source of electric power.
6. Ventilation problem: (1) All occupied areas and functional enclosures.
7. Type and condition of floor: (1) Treatment required.
8. Estimate of general repair requirements.

PRELIMINARY PROCEDURES

1. Authorization: (1) Surgeon General. (2) Using arm or service. (3) Chief of engineers.
2. Procedure with corps of engineers: (1) Selection of qualified architect engineer. (2) Selection of qualified contractor. (3) Estimates of cost (cost per bed; comparison with same size cantonment).
3. Approval of final plans and specifications: (1) Surgeon General. (2) Chief of engineers. (3) Using arm or service.

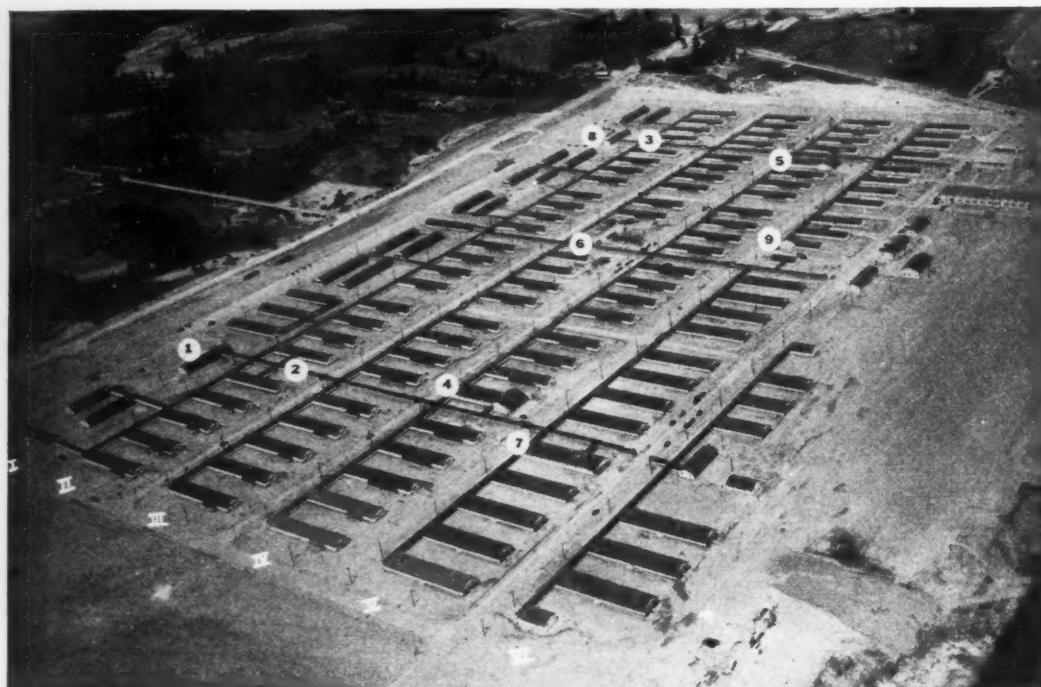
CONSTRUCTION

1. Supervision by: (1) Area engineer. (2) Architect engineer (hospital experience). (3) Contractor. (4) Medical department officer (hospital experience).
2. Equipment coordination: (1) Medical and hospital division. (2) Engineer purchases. (3) Contractors purchases.

FINAL INSPECTIONS AND ACCEPTANCE

ACTIVATION AND STAFF ORGANIZATION

ROUTINE HOSPITAL MANAGEMENT AND MAINTENANCE



SKETCH 1

SKETCH 2

Left: A 2000 bed cantonment type of Army general hospital of temporary one story frame construction. Opposite page: Architect's drawing of a 1750 bed general hospital. Most of the buildings are of two story, semifireproof construction. Below: Interior view of enclosed covered corridor in a hospital of cantonment type.

Army Hospitals Were Ready

Foreword

When the Surgeon General of the Army was asked by The MODERN HOSPITAL for an article on "Our Army Hospitals," it was decided to ask Capt. George L. Slater, M.A.C., a newcomer to the service, to prepare the presentation. In civil life Captain Slater is a hospital administrator. Obviously, therefore, the field of military hospitals was new to him. He has an excellent background for a clear understanding of the situation.

In selecting Captain Slater for this task, it was decided to present the views of an individual who was entirely familiar with hospital problems in our several communities and who had but recently made a complete study of our Army hospitals and who was engaged in the program for their expansion to meet the needs of our increasing military forces.

I have read Captain Slater's article, and it is submitted with my full approval. I believe the photographs Captain Slater has selected will give a clearer picture than any word description of our existing facilities.

JOHN R. HALL, Colonel, Medical Corps, Director, Hospital Construction Division, Surgeon General's Office.

FOR the first time in our history the medical department had hospital plans ready for war in advance of mobilization. These plans assured standardization and saved much time.

Plans for hospitals of the mobilization type were first compiled and announced by the Surgeon General in 1935 (See *Army Medical Bulletin* No. 31, April 1935). They represent many months of careful study by the hospital subdivision of the office under Lt.-Col. Floyd Kramer, M.C., whose work was based on many consultations and revisions.

Colonel Kramer was the first to point out that experience would show need for revisions and changes. Revisions have been made from time to time but the necessity for changes has in no way detracted from the great value of the plans.

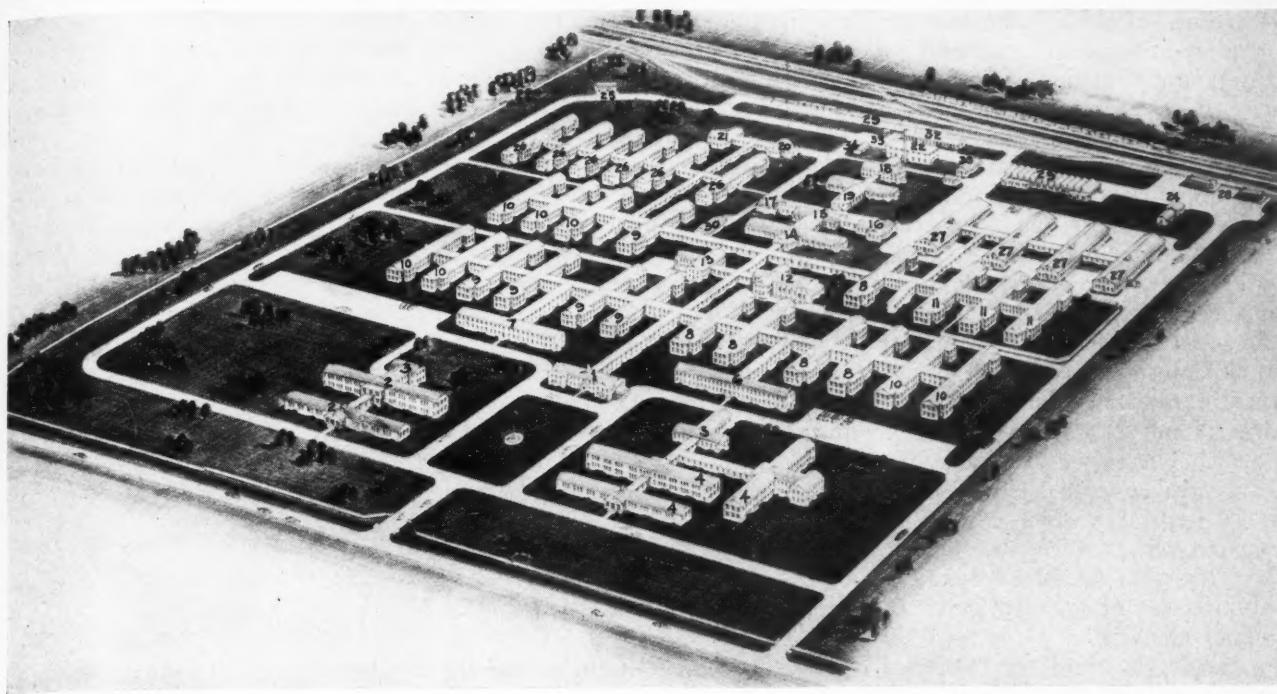
It is not possible, for military reasons, to state the number or percentage of beds necessary to care for the sick and wounded in our armed forces. It is only natural to assume, though, that these beds must increase in the same percentage that our armies increase. Army hospitals are

scattered throughout the zone of the interior and theaters of operation wherever we maintain troops.

These hospitals vary in size from a small 25 bed station hospital to large ones of more than 2000 beds where heavy troop concentrations are established. In addition to these station hospitals of the cantonment type, general hospitals are established with every facility known to medical science for the care and comfort of our sick and wounded soldiers.

In areas in which hospitals are necessary for the immediate emergency only, temporary construction is used. These hospitals are built on a typical plan of standard sized buildings laid out for a definite number of beds with available space for possible expansion. This expansion is obtained by adding sections to present buildings, by moving some buildings that are too small and converting them to other use and by increasing the number of wards, clinics, mess halls and detachment barracks.

In these hospitals, as they are of temporary construction, only the simplest types of facilities are installed in



CAPT. GEORGE L. SLATER

Medical Administrative Corps
Office of the Surgeon General
Washington, D. C.

order to conserve critical materials and to keep the monetary loss to a minimum when they are abandoned. In some of the larger station hospitals, two story semifireproof construction is used where the additional cost is not too great.

In establishing new general hospitals when time is a great factor and critical materials must be conserved, certain large hotels, sanatoriums and hospitals have been leased or purchased and converted for medical use. These buildings are selected in the area in which hospitals are needed. Great care is taken in acquiring only structures that can be converted at minimum expense and that have proper facilities with room for expansion if found necessary.

If new construction is necessary the site selected is picked with the same care, and although the layout is on the same approximate plan as that of the smaller hospitals permanent fireproof construction is used if possible.

In selecting a site for a permanent general hospital, primary consideration is given to locations that will help build the morale of patients who may have to be hospitalized for a

KEY TO BUILDINGS

- 1. Administration building
- 2. Officers' quarters
- 3. Officers' mess
- 4. Nurses' quarters
- 5. Nurses' mess
- 6. Surgical building
- 7. Clinical building
- 8. Surgical wards
- 9. Medical wards
- 10. Isolation wards
- 11. Neuropsychiatric wards
- 12. Patients' recreation building
- 13. Post exchange
- 14. Patients' mess
- 15. Patients' kitchen
- 16. Bakery
- 17. Refrigeration
- 18. Detachment recreation
- 19. Detachment mess
- 20. Morgue
- 21. Hospital shops
- 22. Power plant
- 23. Laundry
- 24. Fire station
- 25. Guardhouse
- 26. Barracks
- 27. Storehouse
- 28. R. R. station
- 29. Ambulance and team tracks
- 30. Post office
- 31. Site for telephone building
- 32. Ambulance garage
- 33. Filling station
- 34. Animal house
- 35. Utility shops



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long time. Healthful climate, pure air, pleasant surroundings, mainline railway transportation, adequate housing for personnel, adequate pure water and high, practically level ground, with proper drainage, are of great importance. These features, in addition to cost of land, construction and future maintenance of operation, are a few of the considerations in locating hospitals.

In order to clarify to some extent the difference between two of these types of hospitals, the sketches on pages 58 and 59 are shown.

Sketch 1 is an air view of a 2000 bed general hospital. This is not a typical general hospital as it is of temporary one story frame construction. It is shown here because it illustrates the flexibility of prepared hospital plans. The plans used for this hospital were of two 1000 bed hospitals placed side by side with some modification.

The buildings have a frontage $\frac{1}{2}$ mile long and $\frac{1}{3}$ mile in depth. There are 137 buildings in the group with enclosed covered corridors connecting the front entrances of all hospital buildings and three corridors extending from front to rear of the area. The location of the various buildings is as follows:

Row I, from left to right across the front of the area: dental clinic, venereal disease clinic, infirmary, receiving building (1); officers' quarters, nurses' quarters, mess and recreation, comprising 14 buildings; ad-

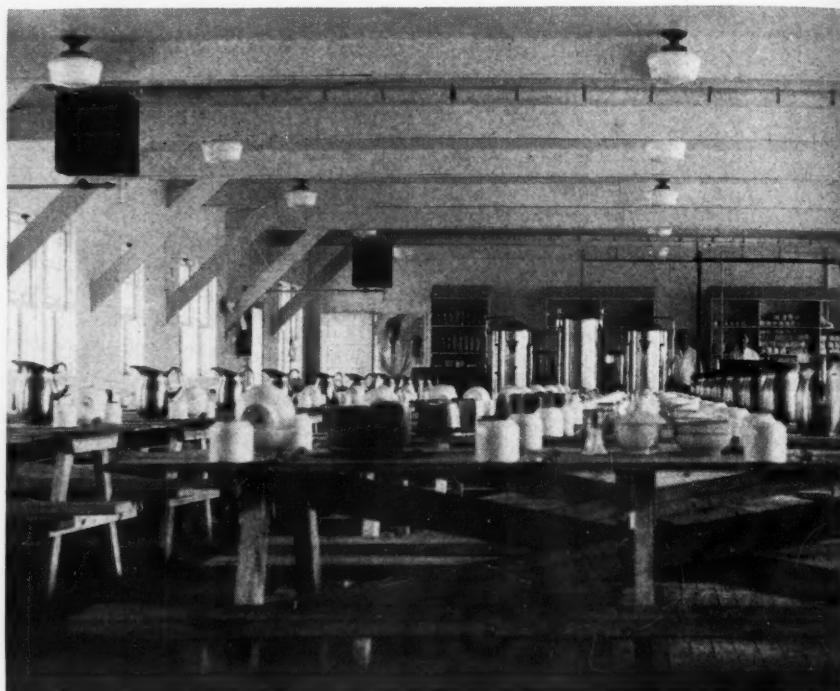
ministration (8), and two more nurses' quarters.

Rows II, III and IV are composed of 18 combination wards; 43 standard wards; 4 neuropsychiatric wards; laboratory and emergency surgery (2); x-ray and main surgery (3); two patients' mess halls (4) and (5); physical therapy; eye, ear, nose and throat; patients' recreation, and post exchange (6).

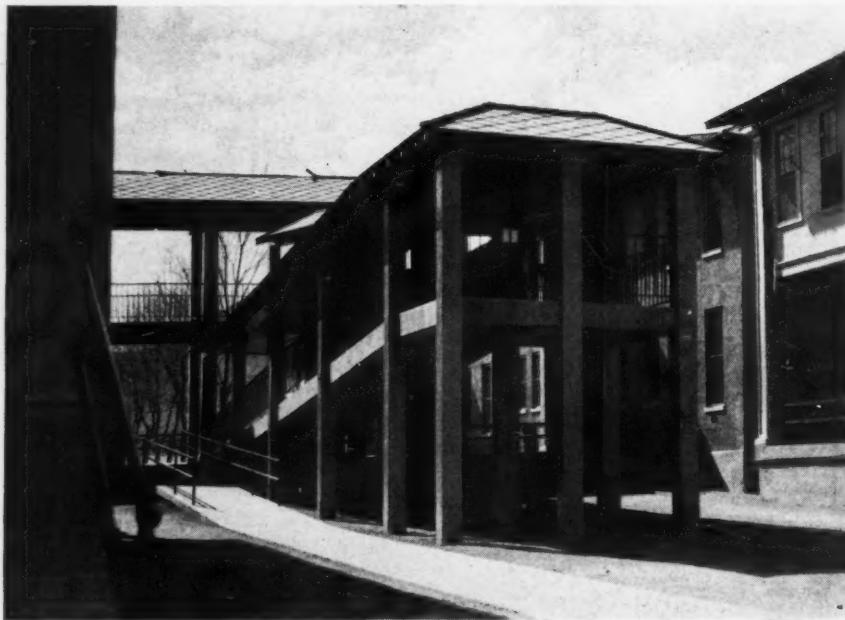
Rows V and VI as far as the central corridor are comprised of 18 detachment barracks, detachment mess (7) and four recreation build-

ings; to the right of the corridor are guardhouse and fire station (9); 10 storehouses, and, in their rear, four hospital shops, laundry and power plant.

A careful study of the plan will show that congestion is eliminated by locating the receiving building for patients (1) and the administration building (8) at opposite ends of the area, with the laboratory and emergency surgery behind the receiving building and the main surgery and x-ray behind the administration building.



Above: The medical detachment mess hall in a hospital of the cantonment type. Left: Ramp leading to second story corridor of a general hospital.



The physical therapy, eye, ear, nose and throat, patients' recreation and post exchange buildings (6) are in the center of the area with the patients' two mess halls in the center of each half of the wards. Fire hazard is greatly reduced by fire-breaks extending from front to rear of the grounds between not more than every five buildings.

The additional photographs on these pages show typical exteriors and interiors of these buildings and enclosed corridors.

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Sketch 2 is an architect's drawing of a 1750 bed general hospital. Most of the buildings are two story structures and of semifireproof construction. Because of the added cost of completely fireproof structures and cost of installing and maintaining elevators, two story buildings connected with two story ramped corridors are used.

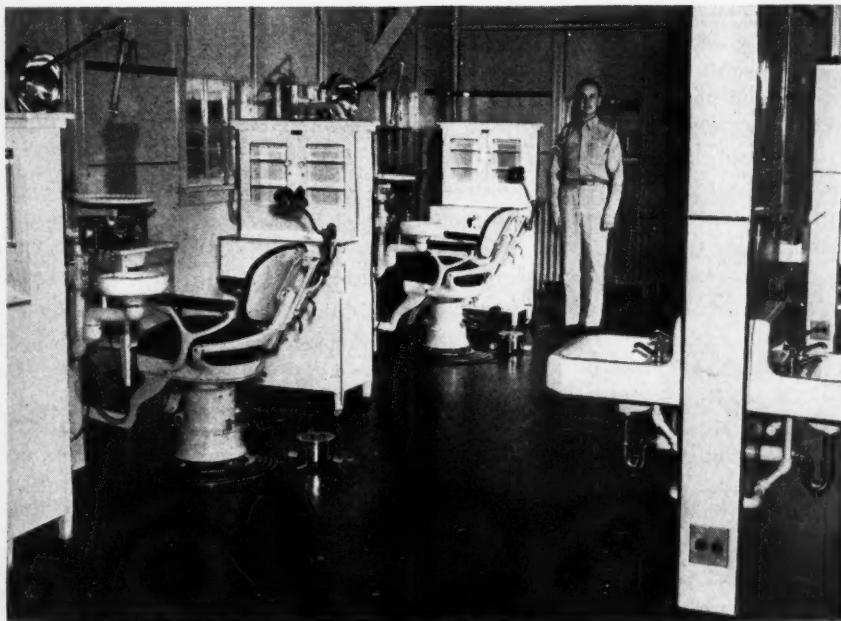
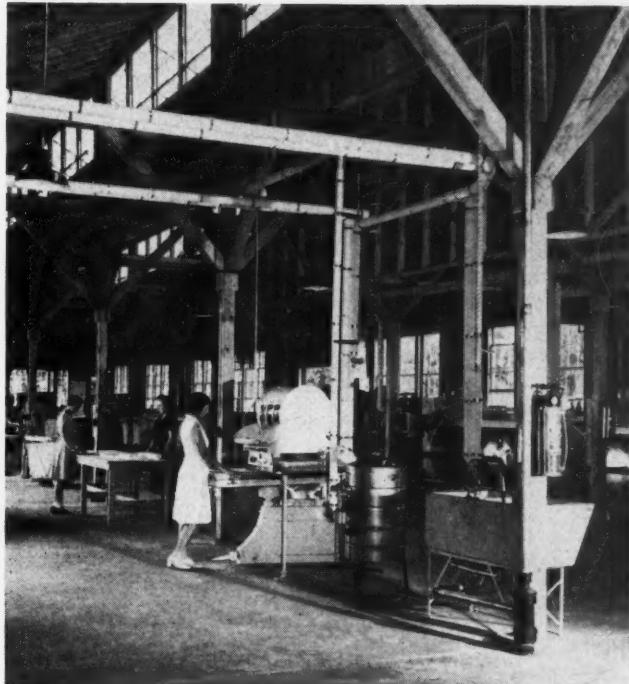
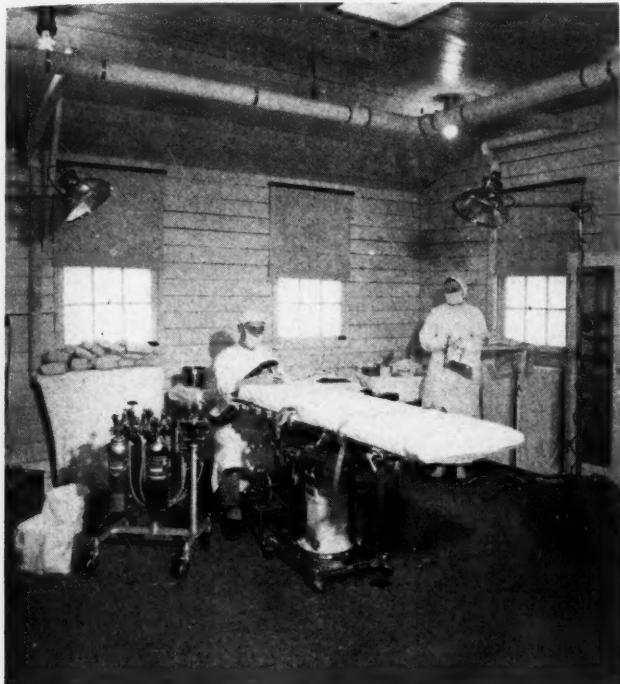
It will be noted that the layout of buildings is practically the same as in the one story construction. As the buildings are wider and longer, the corridors are connected through the

center of the hospital buildings. Because of the distance to surgical and clinic buildings in this hospital, future plans place these buildings on either side of a central corridor. The hospital can be easily expanded by building additional wards, nurses' and officers' quarters and barracks.

Below, left: Eye, ear, nose and throat operating room. **Below, right:** Hospital laundry. **Bottom of page:** Section of a dental clinic in a general hospital.

It is hoped that the sketches and description will give some idea of the thoroughness with which the surgeon general's office has worked for the care of the sick and wounded during the present emergency and for their future convalescence.

It should give some idea of the standardization of plans that has been developed, of the possibility of quick and economical expansion and of the economical operation and administration of Army hospitals that have resulted from the use of these standardized plans.



Detailed plans with itemized bills of materials, necessary equipment and supplies for each building and modification plans for expansion are on file in the surgeon general's office. Actual construction is under the supervision of the corps of engineers. Complete lists of personnel showing the required number of officers, nurses and enlisted men for every size of hospital from 25 to 3000 beds are tabulated in the personnel section, while equipment and supplies are procured through the supply section of the office of the surgeon general.

Every possible means has been employed to give our sick and wounded soldiers all the medical attention that they deserve and that a grateful nation can provide.

How the Navy Meets An Emergency

EMERGENCY hospitalization requirements of the Navy were met at the start by the erection of temporary one story structures, upon which work was begun as soon as it was permitted, the construction data having already been prepared for an emergency by the Bureau of Yards and Docks.

Keeping pace with the immediate needs and demands of the service, this program was continued and, also, many existing hotels and hospitals were taken over to provide beds without delay. In many cases, too, and as far as it could be done, temporary ward buildings were added to extant naval hospital units so as to utilize their administrative and other central facilities.

New hospitals, ranging in capacities from 200 to 2500 beds, were also started in temporary construction and were put into commission in from four to six months. These naval hospitals care for general and surgical and for convalescent and psychotic patients.

One Story Preferred

The temporary hospitals are largely one story in height, with no patients housed on the second story because it is considered that these emergency buildings should be of frame construction. The wide spreading development that results is managed by joining ward units by means of connecting passages.

The arrangement is carefully studied to provide service of the quickest and best kind, but in temporary one story structures with connecting corridors it is necessary that traffic lines be long. However, this length is cut down as much as possible. Due attention is given to the massing of buildings when such consideration does not involve sacrificing the conventional sequence of the structures.

WILLIAM McLEISH DUNBAR

Bureau of Yards and Docks
Navy Department, Washington, D. C.

At the center of each hospital is located an administrative building containing the offices that would be expected for the handling of records and direction of personnel. Adjoining the administration building are four buildings, as follows: (1) receiving and laboratory; (2) surgery; (3 and 4) x-ray and other therapeutic and dental facilities.

Also at the center of the hospital group is a subsistence building. This large structure contains mess halls for ambulatory patients and staff, and from it circulate electrically heated food carts that serve the ward buildings, thus concentrating all food preparation in the subsistence building. It is so laid out as to ensure ample facilities for the preparation of general and special diets, which are served from cafeteria tables by food tray service to ambulatory patients and by the food carts to the wards.

Usually on the same axis with the subsistence building are located the power plant and laundry, thus reducing the high pressure steam lines to the shortest practicable run.

The basic element of the naval hospitals is a long 30 bed ward, one to a building, with bed stations at 8 foot intervals in two rows, one at each side. This permits a 30 per cent increase in the number of beds when required. The ward is entered from a section of the building that contains a treatment room and doctor's office, two quiet rooms, a diet pantry and incidentals.

The nurses' station is half way down the ward, at one side, and the bath, toilet and utilities are in a small wing behind the nurses' station. At least three exits are provided and

closed courts are avoided. The individual buildings are arranged as "fingers" branching off the connecting passages.

The wards provide beds for patients requiring treatment along general medical and surgical lines, including isolation, eye, ear, nose and throat, urological, dermatological, syphilological and psychotic treatment and hospitalization quarters for sick officers.

Component Parts of Hospital

Grouped around the central buildings, a typical hospital of 500 beds, comprising 16 wards, includes the following:

Welfare and conference building.
Storehouse (general hospital supplies).

Bag storage building.
Laundry.

Shop (containing usual facilities for carpentry, metal work and pipe work).

Garage.
Fire house (usually).
Brig.
Incinerator (usually separate building).

Mortuary (one room usually attached to garage, shop or storehouse).

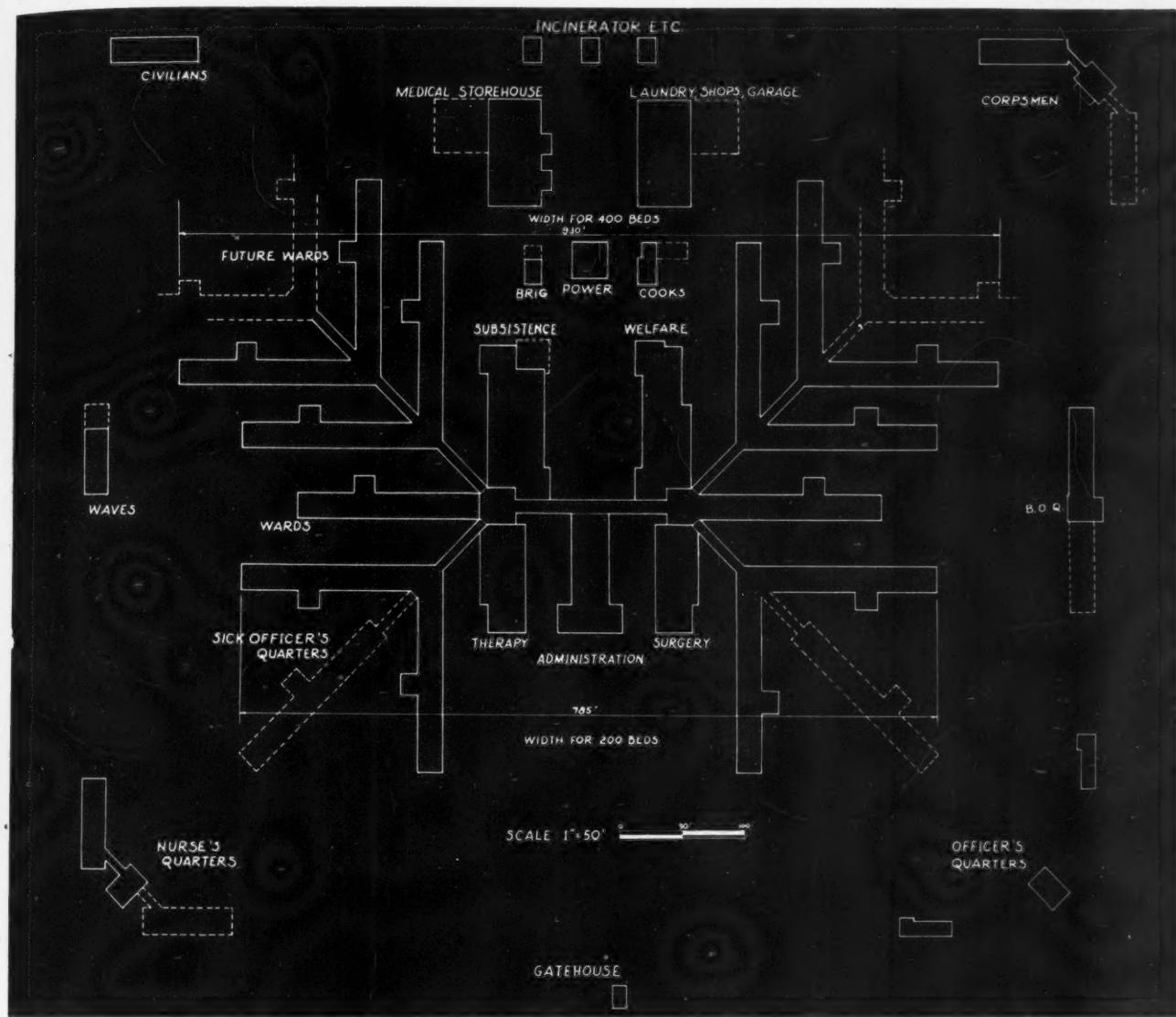
Animal house.

Power plant.
Gatehouse.

Quarters, as follows: bachelor officers' quarters for doctors (including galley and dining room); nurses (including galley and dining room); hospital corpsmen; civilians or technicians (nonmedical employes), provided if no housing facilities are available off station; cooks.

At hospitals in isolated locations, individual quarters are provided for at least three officers, *i.e.* medical officer in command, chief of surgery and chief of medicine.

With few exceptions the structures are of frame construction, generally



with asbestos siding and asbestos roof or with wood siding and asbestos roof, as materials are available in the locality in which the hospitals are being built. The buildings are well insulated and are usually placed on continuous foundation walls rather than on piers. Plaster is used only in limited amounts and is excluded entirely unless it is desired for some exceptional reason.

Interior walls and ceilings of hospital buildings proper are finished with wallboard, plywood or similar material, painted. The cost and the labor of applying the paint are justified by superior sanitary results and by ease of cleaning. To reduce cost, ceilings are not installed in storehouses, garages and unimportant rooms in which personnel is not housed.

A new type of plot plan for naval hospitals that cuts down on the length of connecting corridors and saves as much as 50 per cent of the critical materials required between buildings. The hospital is arranged in four readily administered sections around the central administration building and those devoted to such facilities as laboratories, x-ray and surgery. Another fortunate result is that each ward building projects beyond its neighbor so that breezes are brought in and a large proportion of each ward opens onto an unrestricted area.

The construction details are as simple as it is practicable to use, and plumbing and other fixtures are standard, quickly obtainable from open markets.

All unnecessary equipment is cut out and there is no duplication of nurses' and doctors' calls and similar systems. Lighting systems also are not elaborated. Care is taken to prevent over-illumination of wards and outlets are placed so that patients may read in bed without disturbing others. The signal systems are visual, gongs, bells and buzzers being prac-

tically eliminated. Air-conditioning equipment is furnished for the surgeries only.

Floors, in general, are wood, with linoleum walking strips in wards and in some offices and examination rooms. In operating suites floors are of terrazzo or tile, in accordance with the availability of material, provision being made in each case for removal of static electricity.

Considerable attention has been given to the color treatment of the wards, without increasing expense or time of completion. White is not

U. S. NAVY

used in naval hospitals, but light soft colors are used instead. Greens, creams and warm grays have produced extremely favorable results. The warm simple colors have satisfactory effect on psychotic patients.

For psychotic patients strong rooms and strong wards are provided. These are finished without unnecessary projections, exposed piping and plumbing or hardware. Spring screens are placed on the inside of windows and are sufficiently good in quality and strength to pre-

vent escape and cutting or demolition by the patients, but they are not as expensive a type as would be used in permanent hospitals.

Thorough study is made of fire prevention, and fire walls and masonry enclosures are used to stop drafts and the passage of smoke and fire from one section of the hospital to another. When personnel, as, for instance, hospital corpsmen and Waves, is housed on second floors ample fire escapes and outside stairs are required.

This type of emergency temporary hospital was developed before the previous war and, consequently, has been long tested by the Navy. On the basis of use, the general scheme of the hospital is well determined, if not fixed, and can be reproduced with a minimum of preparation. The plan lends itself to the necessary adjustments that must inevitably be made for local conditions and it admits of variation to meet changes in medical practice or in material or manpower resources.



Behind the Scenes on a Hospital Ship

**CAPT. H. L. JENSEN (M.C.) U. S. N.
CMDR. H. E. STEDMAN (M.C.) U. S. N. R.**

THE evacuation of war casualties by hospital ships has become extremely important during this war because, to date, most of our fighting has been at sea or on native-inhabited islands or in places where the modern hospitals we know do not exist.

Furthermore, the climate of the fighting areas has been either very

hot or very cold and not conducive to the rapid recovery of the wounded; hence, the importance of evacuating casualties as soon as possible to places with modern facilities and an equitable climate. It is important, too, that the patients be well cared for during the process of evacuation.

To accomplish this we have our

beautifully equipped hospital ships which much experience, forethought and careful planning have produced. This forethought has made possible recently the evacuation of well over 4000 casualties of the Navy, Marines and Army with a mortality of only seven patients (0.18 per cent).

Our modern hospital ships are complete hospitals afloat. They are equipped as well as any metropolitan hospital, can care for all types of patients and are ideal for the purpose of evacuation of casualties.

A description of a trip on one of these ships in tropical waters will show how it functions. Our ship operates strictly according to the rules set forth by the Geneva Conference. It is noncombatant and carries no arms or armament. No troops or passengers are allowed to travel on her and even medical officers, nurses and corpsmen are excluded as passengers. Only members of the staff, the crew and patients are aboard when we weigh anchor.

The ship is painted white with a wide horizontal green band and a large red cross painted on either side. At night the sides are well



Obviously enjoying it, a sailor in the sick bay of a warship visits with the ship's chaplain. The pictures used in this article are official U. S. Navy photographs.

lighted by large flood lights. She steams along without escort and carries no combatant communications system and no detecting devices. She is as easy a prey for marauding submarines as a lame duck in a barnyard would be for a hunter.

As we leave the port where the last load of casualties has been transferred, there is no notice of our leaving. We simply cast off, quietly back into the channel and head out to sea. On board, however, there is considerable activity. The crew has the usual duties of preparing the ship for sea while the hospital staff is preparing to receive the next group of casualties.

All the wards and working compartments are cleaned, dressings and solutions are replenished and several hundred pounds of plaster bandages are prepared for casts. During peace times 250 pounds of plaster of paris were stored for a year's supply while during one evacuation recently, 350 pounds were used in a single day. Now the ship is stocked with nearly two tons of plaster.

On the way to the casualty zone all is not work, however, for with the confinement aboard ship and the limited shore liberty some recreation and exercise must be indulged in. During off hours, calisthenics, deck tennis, boxing and other exercises are held on top side. In the evening, bridge, cribbage, chess, acey-ducey and other games are played, with a night now and then devoted to letter writing.

No radios are allowed to operate on the ship at sea, because radio waves are generated by receiving sets which may be detected by submarines or other ships. Music is therefore limited to phonographs. Popular records are few and, because everyone loves music, are soon worn out.

To be prepared for emergencies, drills are held every few days. The most important drills are fire, collision and Abandon Ship. At Abandon Ship, all medical officers must see that their respective wards are evacuated of all patients before leav-

Aboard a U. S. Naval hospital ship. The man in charge of pharmacy is a chief petty officer who has the same qualifications as a civilian registered pharmacist.



It was not possible to include an article on the federal hospitals for Indians in this portfolio. Interested readers may refer to the article, "Health Center for 6000," by J. R. McGibony, M.D., which appeared in January 1943 issue.



ing. For this drill corpsmen act as patients and are placed in stretchers and carried out to the designated life boat. All drills are performed with a minimum of talking and commotion and with a seriousness that be-speaks the life and death matter that they might become.

As we enter the port where we are to receive a group of casualties, all is in readiness. By the time the anchor is dropped much information concerning the patients has been obtained by signal, *i.e.* the number, type, whether ambulatory or stretcher and their location. Some come from the ships and some come from the shore hospitals.

The type of warfare fought at sea

today precludes a hospital ship's following the fleet into action and therefore the ship must meet those returning from battle at a rendezvous or pick up the patients from a shore hospital. Whenever possible, it does both; by rearrangement the hospital ship arrives at the rendezvous at about the same time as the returning combatant ships and the patients are then transferred directly.

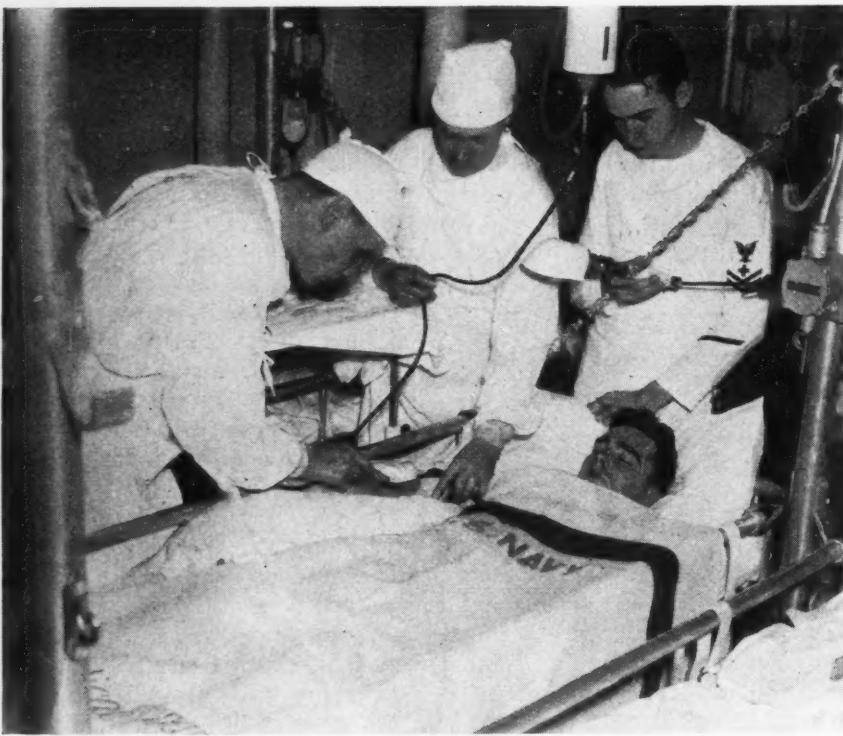
No time is lost in getting the patients aboard, for the ships must evacuate their sick bays and prepare for further action and the shore hospitals must have bed space for more casualties.

Having been notified beforehand, the ships and shore stations have their patients and health records ready for transfer; thus, as the anchor goes down, often the first small boatload is under way. As it approaches our ship stretcher parties are called to the quarter deck, and the admitting officer and several record office corpsmen assemble and prepare to receive the patients.

Because of the foresight in planning the ship, wide gangways were installed on either side up which any type of stretcher can easily be carried. No time is lost hoisting patients aboard in Stokes stretchers. Of course, many of the patients are not stretcher cases and can walk aboard.



U. S. NAVY



Here's what happened to that pint of blood you gave to the Red Cross. It "went into service" to help save the life of a sailor on a warship.

As the patient comes onto the quarter deck a medical officer quickly ascertains his diagnosis and by means of little tickets directs him to the proper ward. If he is not too seriously ill the record office corpsman obtains the necessary information for admission records. Upon arrival in the ward he is transferred to a bunk and from then on the care is the same as that in any well-equipped, well-regulated hospital.

With each group of casualties many types of cases are received. Most of them are wounds caused by gunshot, shrapnel or bayonet but many have burns from exploding shells and bombs. A few still have the ordinary ills that may befall any of us. Fighting at the front does not prevent men from having appendicitis or kidney stones or skin disease and other disorders, even though they seem a little out of place.

The more seriously wounded are those with penetrating wounds of the abdomen and chest or those with large flesh and compound fracture wounds. Patients having wounds of the abdomen with penetration of the bowel must be operated on soon after the injury in order to prevent ex-

tensive peritonitis. All such cases received by us, therefore, have been operated on and are convalescing. It is remarkable how nicely they are convalescing and how little reaction they have had, owing to the use of sulfa drugs.

Sulfa drugs have made the treatment of wounds much simpler and have greatly hastened healing by preventing infections. Instead of complicated irrigating systems and daily dressings, such as were used during the last war, large compounded wounds are now dusted with a sulfa drug, dressed and immobilized with a plaster cast.

The patient is much more comfortable with the part immobilized and does not have to suffer the agonies of daily dressings.

During the evacuations there have been a number of patients having wounds that might be termed "near misses." One of the oddest was the case in which a bullet passed laterally through the neck with nothing more serious than the quite complete removal of the patient's tonsils.

For the first two days after receiving casualties everyone is very busy, the doctors with histories, physicals,

dressings and operations, and the nurses and corpsmen with the general care of the patients. The latter is most important. While all patients received have had excellent care, little time on combatant ships and advanced hospitals can be spent in giving baths, shaving patients and attending to the many little things that go so far to make them comfortable. All these things can be done on the hospital ship and it is gratifying to see the way the patients' spirits improve under this care.

Since we are in a tropical area and the heat is intense a greater part of the time, the two luxuries enjoyed most on our ship are ice cream and ice water. Everyone is fond of ice cream and a serving is passed to the patients every mid-morning and mid-afternoon. Some whose appetites are jaded practically live on ice cream for the first few days. A plentiful supply of ice cream was made possible by the modern process of dehydration. Ice water is supplied by modern refrigerated "scuttlebutts" and it is not an unusual sight to see a line-up at the one on the quarter deck whenever we are in port.

As we near the port of evacuation on our return, preparations are made for transferring the patients to the base hospital. All health records with treatment data are completed and x-ray films are assembled to accompany the patients.

Tags are made having the patient's name, rate and diagnosis. When secured to the patient, these facilitate his disposition upon arrival at the hospital.

Having been notified in advance of our arrival time the base hospital has ambulances for stretcher cases, buses for ambulatory cases and trucks for baggage assembled on the wharf.

As soon as the ship is docked the transfer begins and because of careful planning is executed with smooth precision and no delay.

On several occasions the transfer has been made with the accompaniment of a military band and to those men who have been through the terrible ordeal of battle the sound of music is most heartening.

As the last of the casualties leave the ship the nurses and corpsmen quickly clean up the wards in anticipation of a well-earned liberty.



U.S.C.G. Stands for "Speed"

R. B. HOLT, M.D.

Medical Officer in Charge

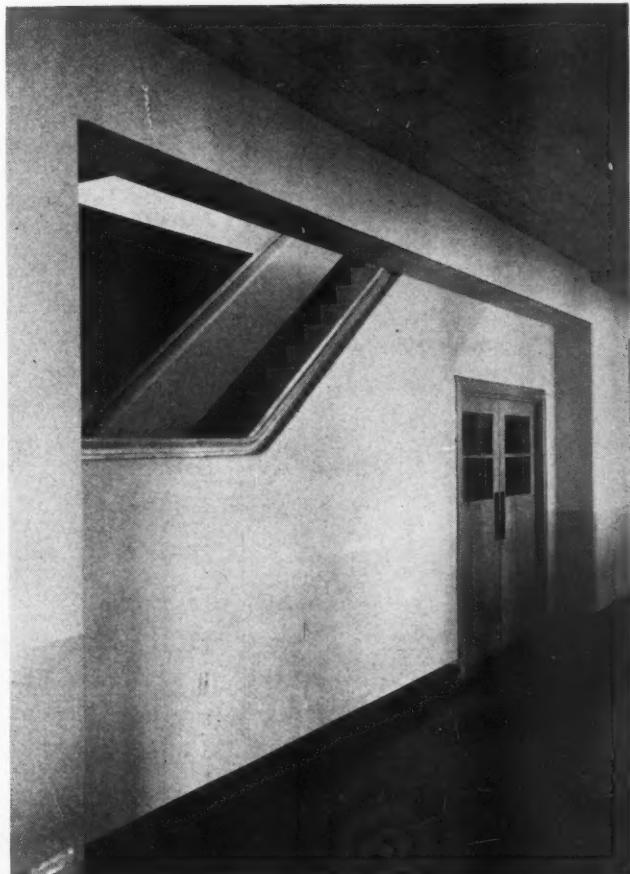
THE problem of the U. S. Coast Guard in building the U. S. Public Health Service Hospital, Sheepshead Bay, N. Y., was to design and construct speedily a 400 bed hospital in conjunction with a military training center for 18,000 men, using noncritical materials.

The hospital handles only acute cases and daily "sick call." All patients are men between the ages of 18 and 40. All, except officers, are subject to central discipline. Patients must remain in the hospital until fit for active training duty. There are no provisions for convalescents elsewhere.

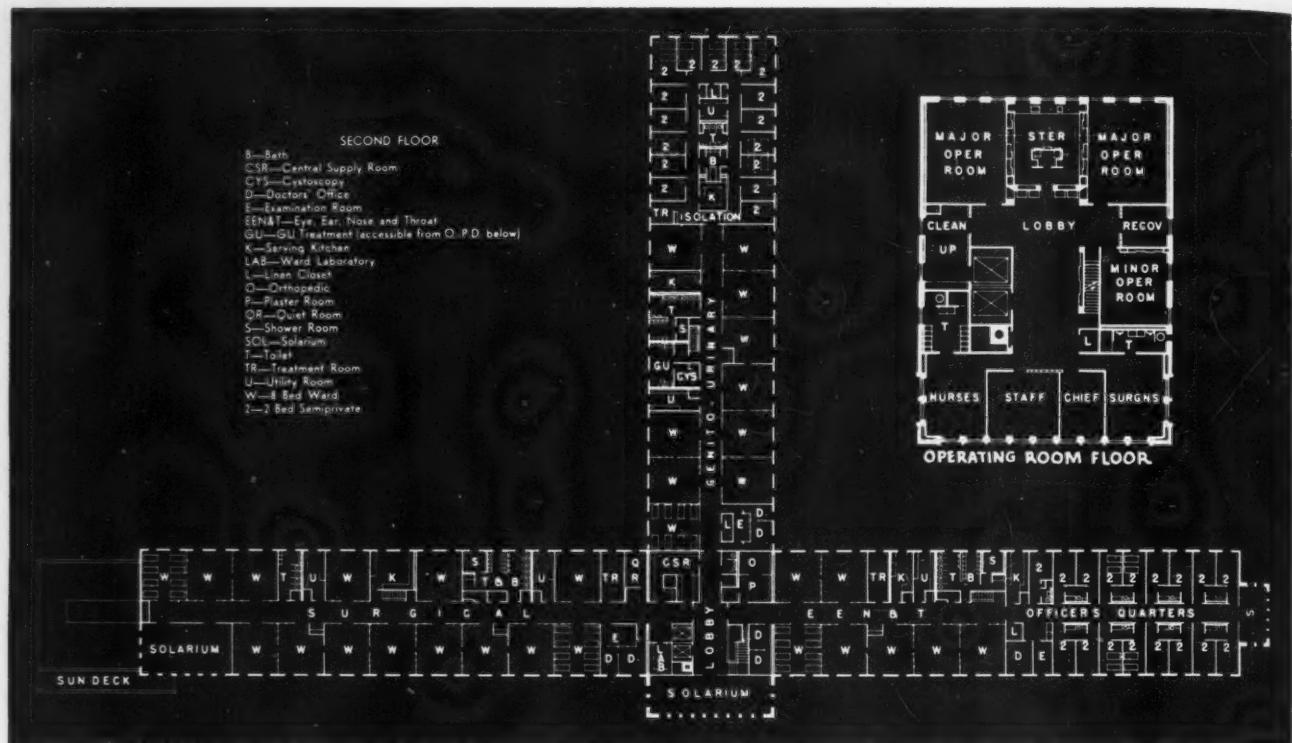
Laundry service, heat, light and power, daily food deliveries and ambulance service were available and did not have to be included in the hospital plan.

The building faces south directly on the ocean, with a sea wall and terrace between it and the water. Prevailing winds from southeast and northwest provide natural ventila-

Above: Exterior view of the west wing of the hospital looking toward the east. The building is constructed of three wings of two stories each, with an operating suite built over the intersection of the three wings. Right: Stairs are arranged so they are visible to encourage their use and reduce the elevator load, yet are so planned that the corridor wall continues.

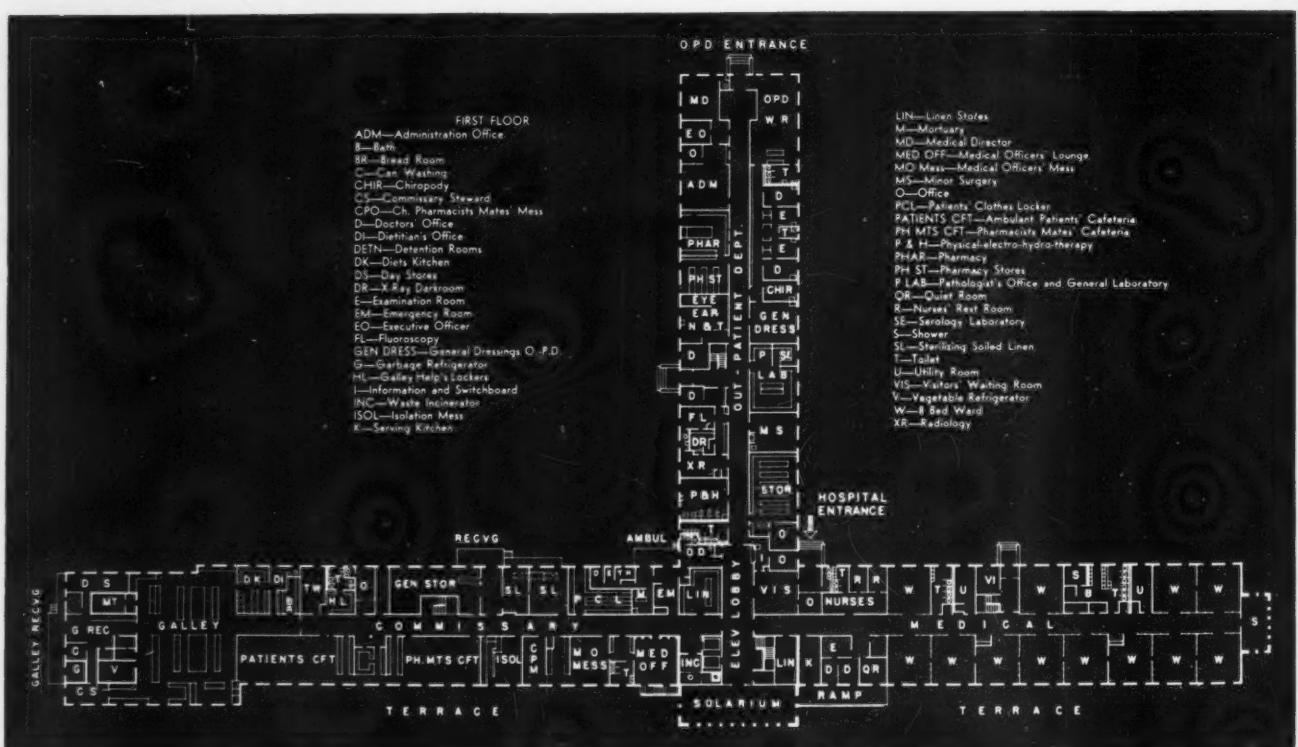


U. S. COAST GUARD



Below: First floor. In the north wing are housed the administrative offices, pharmacy, laboratory and out-patient department. Only patients who have been previously examined by the barracks medical officer are received in the out-patient department and through it are certified all the bed patients except emergencies. Departments include general examination and dressing; eye, ear, nose and throat; physical therapy; electrotherapy, and minor surgery. The dental clinic is housed in an adjoining building because unusually large requirements necessitate 31 chairs. The galley space is located in the west wing.

Above: The second floor is given over entirely to nursing. In the north wing are the isolation wards, the genito-urinary department and a suite of semiprivate isolation rooms. The east wing contains eye, ear, nose and throat wards and a suite of semiprivate rooms for officers, while the surgical wards are located in the west wing. Ward wings are divided into two nursing units, each with its utility rooms, toilets and nurses' station. A serving pantry is centrally located in each wing. On the operating room floor, two major operating rooms face north and are connected by a sterilizing room. A minor operating room adjoins them.



CONSTRUCTION DETAILS

STRUCTURE: Reinforced concrete columns, floor and roof slabs, using a two-way floor arch system. Bays determined by standard ward unit and not varied throughout the plan.

WALLS: Concrete block used as exterior double wall, with 2 inch air space. Inside face of exterior wall, dampproofed with mastic compound. Block unfinished on both exterior and interior. Added interest given to exterior block by use of various sands and colors in the mix, irregular surface texture and two heights of blocks (6 and 8 inches) laid with irregular vertical joints. Advantages of this type of construction were: neat practical appearance at low cost; speed in erection; use of masons (who were more plentiful than any other building mechanics) for practically all conditions; use of a noncritical building material that is easily obtainable and locally manufactured; no demands on crucial transportation facilities.

INTERIOR FINISH: Painted smooth concrete blocks, thus eliminating all plaster. Block also used for interior partitions. "Wet" rooms and spaces that must be scrubbed, salt glazed block. Concrete beams and columns, exposed and painted. Stairs, cast concrete. Balustrades, concrete with wood handrail. Color, flat tones, with different color scheme for each wing.

FLOORS: Floor finish generally, asphalt tile applied directly to concrete slab. Wet spaces, ceramic tile. Operating suite, terrazzo, with grounded grid. Galley spaces, quarry tile.

CEILINGS: Corridors, wards, offices, treatment rooms, fiber acoustic tile units fastened directly to underside of slab. Elsewhere, exposed painted concrete slab.

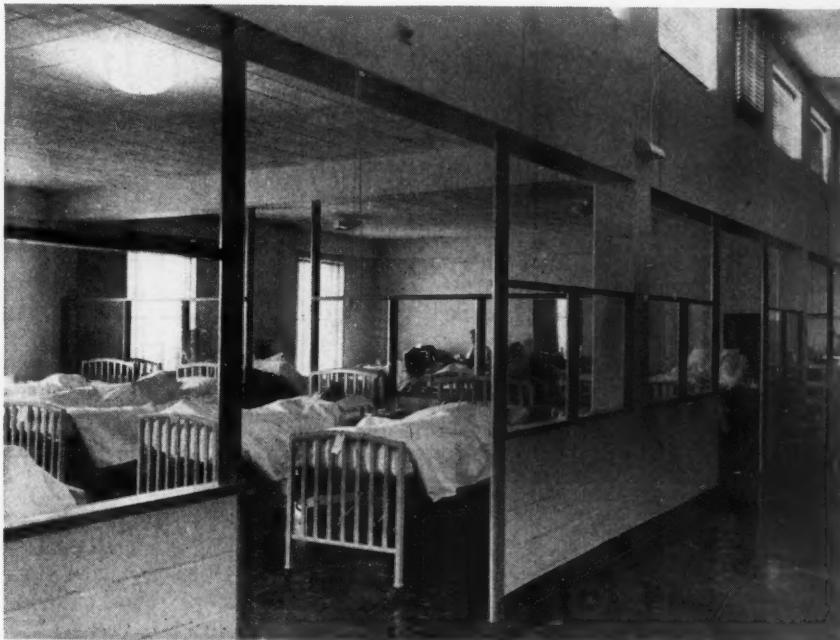
HEATING: Generally, two-pipe vacuum system with radiators as heating units. Galley spaces and clerestories, unit heaters. Mechanical ventilation in galley spaces and operating rooms.

LIGHTING: Hospital wired especially for blackout purposes. All essential services, including operating suite, utility rooms, elevator, nurses' call, doctors' call and bedside outlets, can be maintained during a blackout, while all general lighting is shut off at main switch. Window frames designed with an overlapping venetian blind that acts as ventilating blackout screen so that the hospital can operate at full capacity through any air raid drill or blackout.

COST: Excluding land, entire cost including all fixed and loose equipment, \$1,176,000. Cost per cubic foot, building alone, 70 cents. Cost per bed, building alone, \$2100.

tion. Speed was a primary consideration; seven months elapsed between the beginning of conferences in April 1942 and the occupancy of the building by patients.

Three wings of two stories each form a T, topped at the center intersection by a third story operating suite. The stem of the T projects back in a northerly direction into the street system of the training schools,



Concrete block screen walls with round posts and glass screens above separate eight bed wards from each other and from the corridor.



A typical operating room looking toward the sterilizing room, from which sterile instruments are passed through a sliding glass panel.

with the out-patient department entrance at its extreme end. Thus, the remainder of the institution is remote from traffic.

An 8 bed Rigs type of ward is the standard unit, with a segregated isolation section for all suspects and communicable disease cases at the end of the north wing on the second floor. On the second floor corridor ceilings are raised to form a cler-

story of glass block panels and vent openings, adding to the light and cheerfulness of the interior.

A group of semiprivate rooms for officers is provided at the end of the east wing on the second floor. Solariums looking out over the sea serve all categories. There is no basement, as the building is constructed on sand, with high tide only 5 feet below the grade.

Cradle of Public Health

Serves Federal Employees

THE first act of the federal government of the United States on behalf of the health of a civilian group was passed in 1798—an "Act for the Relief of Sick and Disabled Seamen." The United States Marine Hospital at the Port of Boston was the first (1799) institution to be established under the act and is the oldest hospital in the state of Massachusetts and the fourth oldest in the United States.

This hospital was the cradle of the U. S. Public Health Service, long under the Treasury Department, now under the Federal Security Agency.

Patients treated at the hospital include: (a) American seamen and Maritime Service enrollees; (b) foreign seamen; (c) officers and enlisted men of the Coast Guard Service, U. S. Army and U. S. Navy; (d) officers and seamen on vessels of the Coast and Geodetic Survey, Lighthouse Service and Bureau of Fisheries, and seamen from the Army Engineer Corps and Army Transport Service and Mississippi River Commission; (e) beneficiaries of the Employees' Compensation Commiss-

sion and Veterans' Bureau, and (f) officers and employees of the Public Health Service.

The present building—the sixth to house these beneficiaries—was erected in Boston (Brighton) under the authority of the Emergency Construction Program Act of 1936, when an allotment of \$2,206,000 was made, to include cost of site, buildings and administration. The unit was designed by the office of the supervising architect, Public Buildings Administration, F.W.A., Washington, D. C., under Winchester E. Reynolds, commissioner.

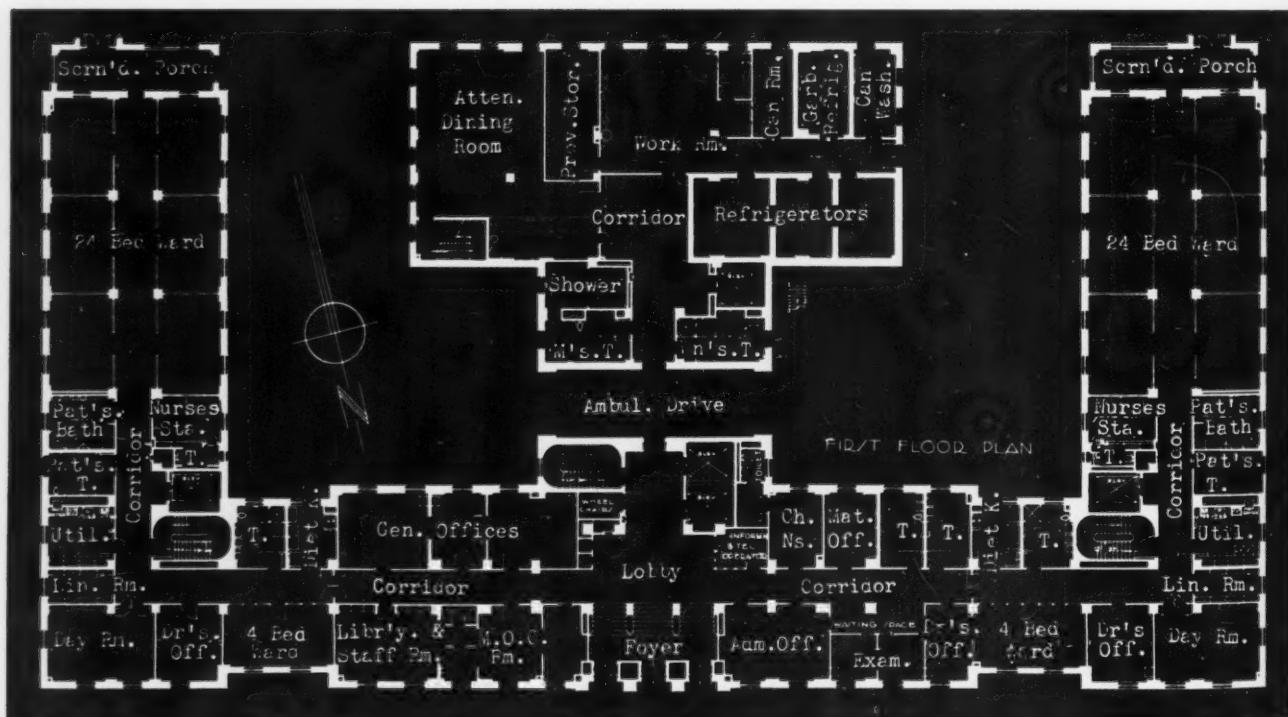
Dedicated on June 6, 1940, the group consists of 11 buildings as follows: main hospital building, with a capacity of 336 beds; nurses' quarters, senior officers' quarters, eight

junior medical officers' quarters, single attendants' quarters, boiler and laundry building, 10 car garage building and a garage and carpenter shop building. The present layout is designed for future extension.

The convalescence of many sailors must be completed within the walls of the hospital, as the men are discharged to join their ships when these are in port. This necessitates a longer stay in the hospital than is usual in civilian institutions, and this fact modifies the routine somewhat. The cubicles in the wings on the street floor are used for these convalescent cases.

This cubicle system, an innovation in design for Marine Hospitals, is used on all floors. Each wing, except West 5 (surgery) and West 3 (strong

The street floor houses administrative offices, out-patient clinic and basal metabolism room. On the front of the building are a patients' library and a medical library. In the basement (not shown) are the matériel offices, canteen, postoffice, barber shop, record rooms and mortuary.



U. S. PUBLIC HEALTH SERVICE

HELEN F. WELCH

Librarian
U. S. Marine Hospital
Boston

room) is divided by glazed partitions into four bed wards, three on either side of a central hall. At one end is a fourth glazed room equipped with desks, built-in cabinets, chart carts and a toilet. This room is used as a nurses' station, thus allowing a maximum of ward supervision with a minimum number of nurses on duty.

At the end of each wing is a patients' lounge room but, owing to sudden expansion of the hospital census because of the war, these rooms have had to be turned into wards and the auditorium has been opened for patients' recreation.

This auditorium occupies the entire central wing on the third floor, seats 250 and boasts a fully equipped stage and projection room. Medical meetings are held here and entertainments and movies are given almost daily for the ambulatory patients. The rear of the room, furnished with comfortable chairs, ta-

The dietetic department occupies the two lower floors of the central wing. Actual cooking is done in the main kitchen on the second floor which adjoins the patients' cafeteria. Also on this floor are the dental clinic, the eye, ear, nose and throat room and the tonsillectomy room.

OUTLINE OF CONSTRUCTION DETAILS

GENERAL DATA: Main hospital building frontage, 250 feet on Warren Street, extends 122 feet to the rear. Contents, 23,660 square feet and 1,701,200 cubic feet. Designed in contemporary architectural style, with exterior walls of brick, greenstone trim, wood windows, greenstone entrance steps and flat roof; foundation, of concrete. Fireproof throughout, with composition and promenade tile roof. Structure, E-shaped; long section, seven stories high, facing Warren Street, with three wings, east and west, each five stories high, and central wing three stories high, extending to the rear. Central wing connected to main building by arched ambulance entrance.

REFRIGERATION: 12 ton ice plant, located in boiler house. Makes twenty 50-lb. cakes of ice daily; cold calcium chloride brine also circulated to hospital through cooling coils for four cold storage rooms, each approximately 15 by 18 feet, in food preparation area. Portion of circulating cold brine also shunted through heat ex-

changer to provide cold water for drinking fountains.

AIR CONDITIONING: Operating rooms, workroom, and semiprivate two bed rooms air conditioned, using chilled water as medium. Temperature and humidity controlled by switch in each room.

ELEVATORS: Five automatic elevators, two serving main building for seven floors and basement; one each in east and west wings serving five floors and basement. Dietetic department served by elevator connecting first and second floors of central wing.

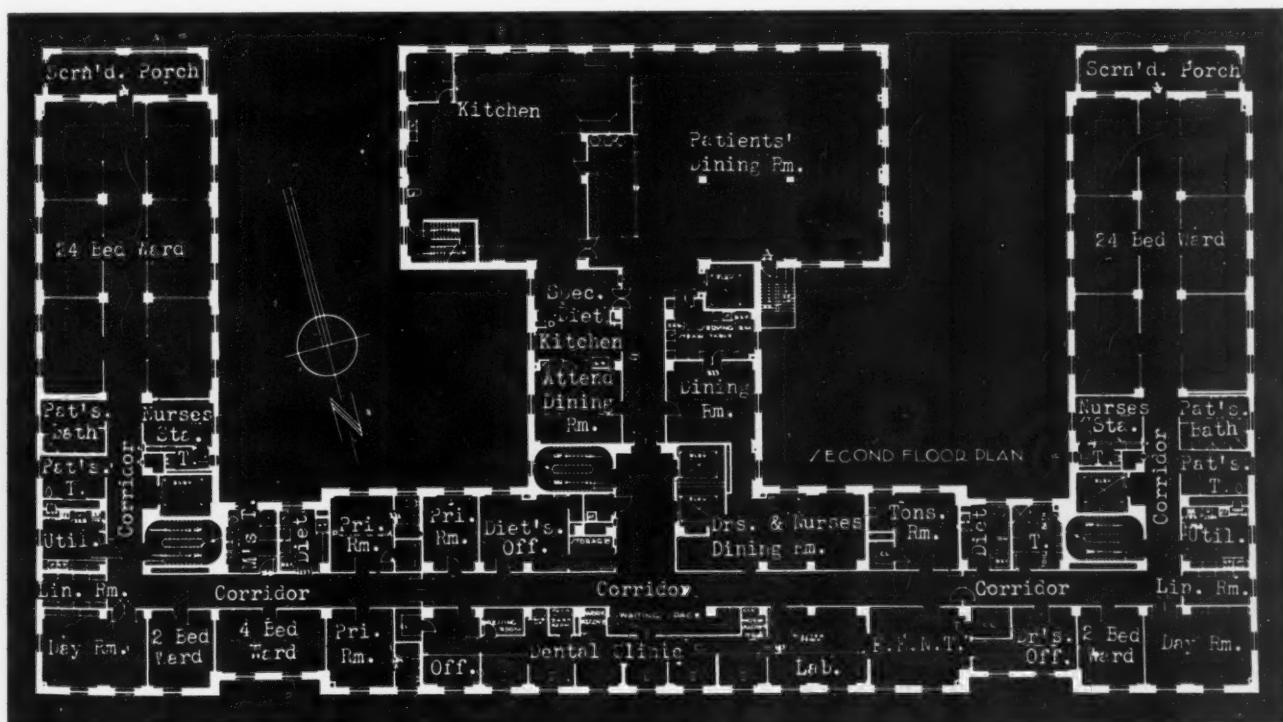
COMMUNICATION: Telephone switchboard, intra-mural call system and master radio receiver centralized at information desk in lobby. Doctors and heads of departments check in on illuminated board at information desk; names switched to similar boards in offices throughout building. Silent call system operated by mercury switch flashes red light on panel, white light in corridor, nurses' station and diet kitchen. Room number flashed in nurses' station.

bles and a piano, is open to the patients from 9 a.m. until 9 p.m. under the supervision of a social service worker.

The central portion of the third, fourth and fifth floors is given over to semiprivate, two bed rooms and wards, the medical, genito-urinary

and surgical clinics and offices and dressing rooms. The dental clinic, nurses' dining room, dietitian's office and eye, ear, nose and throat clinic occupy the second floor central.

Equipment for the wards is modern and adequate. Behind each patient's bed is a panel which contains a bed light, night light, signal system and outlets for ear phones over which programs from the master radio receiver in the lobby are provided. The bed lights are so shaded



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that they throw the light only on the patients' own beds; the night lights may be dimmed by the adjustment of a shield.

Beds on certain floors are equipped for traction and all adjust top and bottom for position. A metal stand and arm chair for each patient are provided and there is an adjustable bed table for use across the bed for reading and serving meals. Whenever possible, stainless steel equipment has been introduced throughout the hospital.

The surgical service is located on the west side of the fifth floor. It includes examination rooms, dressing rooms, offices, minor surgery room, two operating theaters, plaster room and other services.

Green Preferred for Surgery

The more important features of the operating suite are as follows:

1. *Use of Color:* The wainscoting, ceilings and floors are finished in shades of spinach-leaf green and all linens (drapes, caps, masks, gowns, surgeons' operating suits and nurses' uniforms) are dyed the same color.

The actual dyeing of the linen is simple and economical and is done in the hospital laundry (no extra or special equipment needed).

2. *Explosion Safeguards:* In accordance with the National Electric Code, the well-known precautions were taken in the operating rooms to prevent explosions. These include (1) explosionproof wall and floor plugs, (2) the absence of telephone and bell-ringing devices likely to produce igniting sparks, (3) proper groundings through metal strips in terrazzo flooring and (4) air conditioning with provisions to maintain relatively high humidity in the operating rooms.

In addition, other practices to prevent electrostatic sparks are observed, *i.e.* the use of the Horton intercoupler and drag chains for metal furniture. The war situation, however, has prevented going the full way in obtaining all recommended conductive rubber articles.

The room in which the anesthetic gases are stored is constructed according to the National Electric Code and is ventilated by mechanical means, *i.e.* air ducts.

3. *Installations and Equipment:* All operating suite cabinets and cupboards are built-in and finished in similar tones of spinach-leaf green with working tops and sinks made of stainless steel.

Furniture in the operating suite (exclusive of operating tables finished in chrome steel), including tables, stands, chairs and stools, is of stainless steel.

4. *Orthopedic and Fracture (Plaster) Room:* The utility and splint cabinets in this room are finished in spinach-leaf green also, with work tops of stainless steel.

A unique feature is a work bench with an oaken top, equipped with a vise, and wall cabinets containing easily accessible tools.

Another feature is an orthopedic utility cart with bins and drawers for the storage of various articles needed in the treatment of fractures. This cart can be taken to the wards when needed for traction suspension of fracture cases.

The department of radiology occupies the east end of the sixth floor. Centralization of the darkroom and nearness of the pass boxes to the x-ray table are features that not only save steps and unnecessary motions but facilitate speed when large group examinations are being made.

The satisfactory functioning of the drains in the darkroom has been one of the advantages gained by locating the x-ray department on this upper floor.

A further advantage from this location comes in the traffic flow, since only patients scheduled for this service come to this end of the sixth floor.

Adequate filing space for film is provided on steel shelves in a room containing an overhead draft system, directed through a tunnel to the outside.

The laboratory occupies the entire seventh floor, which offers the advantages of a location isolated, but readily accessible. The space is divided into several large, airy, well-lighted rooms, each serving a specific function. One room is devoted entirely to the drawing of blood specimens, while in another bacteriology is the sole activity. The equipment is new and modern in every detail and includes an individual

microscope for each technician, an automatic tissue preparation machine, a photoelectric colorimeter and a Van Slyke gas apparatus for manometric chemical analyses.

A recent innovation has been the establishment of a blood plasma bank. One room is devoted to the processing of blood plasma obtained from blood donors who are chiefly enlisted men of the United States Coast Guard. The plasma is frozen and kept in a frozen state in the laboratory. In conjunction with this, a whole blood bank is in operation, thus making transfusions a matter of minutes instead of hours.

In addition to the main laboratory, there is a clean, well-ventilated, airy brick animal house built on the roof of the central wing.

The dietetic department occupies the two lower floors of the central wing.

The attendants' dining room, refrigerators and storeroom are on the first floor, and here meats and all vegetables are prepared.

The actual cooking of the food is done in the main kitchen on the second floor adjacent to the patients' cafeteria. Food for the wards is dispatched in electrically heated trucks to diet kitchens at either end of each floor and served directly to the bed patients on dishes, which are kept in electrical warming ovens in each diet kitchen.

Special Diets Served in Cafeteria

Also on the second floor is a special diet kitchen where all weighed and special diets are prepared, and this food is sent directly to bed patients in heated food conveyors. As it is the custom in most Marine hospitals to serve as many special diets as possible in the regular dining room, ambulant patients requiring these are served in the cafeteria from the special diet kitchen. Men in wheel chairs and on crutches are also served in the regular dining room from a heated food truck, a little earlier than the ambulant cases. This custom gives the patients a chance to mingle with one another under normal conditions.

(A description of the laundry of the Marine Hospital, Boston, will appear in the housekeeping section of the September issue.)



U.S.P.H.S. MEDICAL CENTER, HOT SPRINGS, ARK.

Battlegrounds in the War on Venereal Disease

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WAR has wrought many changes in the American scene and it is only natural that their reflections should be cast upon various phases of the institutional field.

Therefore, it is not surprising that, inasmuch as the modern hospital is so sensitive to the needs of the nation in war time, one of the more profound new developments of 1943 is to be found on this front line of health.

This development, in which all who are concerned with hospitals will be interested, is the establishment in various parts of the country

of hospitals for administering intensive venereal disease therapy.

With the war has come a tremendous dislocation of our population. This shifting and a more or less continuing attendant mobility engendered also by the problems of production and building a mighty war machine had a concomitant: a tendency toward a spreading of the venereal diseases both within and beyond state boundaries. Both syphilis and gonorrhea were increasing in certain areas.

A new type of hospital, one facet of the many-sided public health bat-

tle against the venereal diseases, was conceived. Here, infected women would be isolated, rendered noninfectious, cured and, so far as possible, rehabilitated so that they would cease to be a health menace and would be placed in useful work.

The hospitals are officially designated "Rapid Treatment Centers" and they represent a fine example of cooperation among local, state and federal agencies.

On April 27, 22 of the centers were in operation; 11 were approved but not yet operating. Applications were pending for seven, and 42 others have been proposed, a total of 82. They are being located in strategic points in various parts of the country. It is estimated by the U. S. Public Health Service that about 25,000 persons suffering with infectious syphilis

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and gonorrhea will be hospitalized in the centers during 1943.

When all the centers are in operation at full capacity, it is anticipated that they will provide a tremendous impetus to the effort being made to lower the prevalence of venereal disease to the irreducible minimum.

To help achieve this aim and because of the epidemic nature of the venereal diseases, the mobility of the affected population and the need for accurate evaluation of treatment techniques, the U.S.P.H.S., the Federal

medical officer, a nurse and a record analyst to each center. All other maintenance and operations personnel for the center will be paid from Lanham Act funds.

Also, in those rapid treatment centers operated by state health departments, a qualified, nonmedical person is employed by the state in the capacity of administrative officer. He is charged with the responsibility of center management.

The federal physicians assigned to these centers will, however, be re-

ated. Involuntary admissions should result principally from commitments under quarantine laws.

It is expected that the majority of patients will be admitted upon a voluntary basis. Already, excellent results along this line, in which all stress is away from restraint or penal aspects and is put upon the hospital aspect, are being experienced.

Normally, patients will be released after a reasonable observation period (approximately from four to eight weeks) following completion of treatment. Release of patients admitted involuntarily will be at the discretion of the state health officer or his deputy.

Physicians assigned to rapid treatment centers by the Public Health Service are given special training in the newer intensive treatment meth-



View of the barracks for patients at Wakulla-Florida State Board of Health Hospital No. 1.

Works Agency and the Office of Community War Services, F.S.A., the federal agencies providing material assistance to the centers, are recommending the application of uniform treatment and rehabilitative methods.

Primarily, however, the responsibility for the administration and maximum utilization of the rapid treatment center facilities rests with state health authorities.

The centers generally will fall into one of two administrative categories. For the most part they will be operated by state health departments. Some, however, will be operated directly by the U.S.P.H.S. where the interstate spread of venereal disease is a serious problem.

In the majority, or state-operated centers, upon request by the state health officer, the U. S. Public Health Service will assign a commissioned

sponsible for all medical care and treatment that may be required.

The Public Health Service will operate a few rapid treatment centers. The responsible physician will be designated the "medical officer in charge." He not only will be concerned with the care of patients but will also manage the center. An administrative officer will assist him in this additional responsibility.

Policy as to the admission and release of patients is one of the most important administrative points connected with the new type of hospital.

Here, the state health officer assumes responsibility. At his discretion, admission to the centers may be on a voluntary or involuntary basis.

In either case, persons suspected of having, known to have had or who have been under observation for a venereal disease may be admit-

ods for syphilis and gonorrhea at Ann Arbor, Mich., and Detroit under the supervision of Doctor Udo J. Wile, professor of dermatology and syphilology of the University of Michigan School of Medicine.

Public Health Service nurses selected for assignment to the centers are being similarly trained at the City Isolation Hospital, St. Louis.

During most of their stay, patients generally will be ambulatory and will require little bedside nursing. Most of the bed accommodations, therefore, will be to provide a domiciliary type of care during the necessary observation period following treatment. Consequently, they will occupy considerably less than the standard hospital space allotment. The centers will make use of already existing physical facilities, converting them as needed to suit the purposes and functions of the program. Abandoned Civilian Conservation Corps camps, remodeled small hotels, sanatoriums and hospital buildings and special wards in general hospitals are some of the types of physical units being used.

Equipment will not be elaborate because the average center is patterned after a well-equipped outpatient venereal disease clinic. Only

U. S. PUBLIC HEALTH SERVICE

such equipment as is required for the diagnosis and treatment of venereal disease or for emergency medical care is needed. For surgery or hospitalization other than that required for the treatment of venereal diseases, the nearest available hospital facilities will be utilized. Standard treatment equipment will be installed, together with dark-field microscope, centrifuge, sterilizer, refrigerator, incubator, work tables, glassware and other laboratory apparatus and supplies.

Serologic tests and spinal fluid examinations will be made in state or local public health laboratories. Although x-ray equipment may not be purchased with Lanham Act funds, it may be rented or leased with such funds if the need arises. The responsibility for the type of

Because most of the patients are ambulatory, ample mess hall facilities must be provided.

syphilis treatment used will rest with the medical officer in charge with approval of the state health officer when such centers are operated by the state health department.

The types of rapid treatment plans for syphilis involved are: use of fever and chemotherapy, massive dose arsenotherapy and schedules of treatment requiring intravenous therapy two or three times weekly over a period of from six to eight weeks.

The sulfonamide drugs, combined with fever therapy when necessary, will naturally be used in the treatment of gonorrhea.

The technics and results of rapid treatment for the venereal diseases, particularly of syphilis, are of tremendous significance to the medical profession and will have a profound influence on future venereal disease control activities.

Therefore, in all rapid treatment centers, uniform records of tests and observations will be maintained. These records will be made available for a pooled evaluation of the data at such time as the surgeon general may designate for the preparation of a progress report on types of rapid treatment.

Three types of records will be kept by each rapid treatment center:

1. The basic hospital record, which will be kept on forms designed by the Public Health Service for use in Marine Hospitals (Series 1946). This record remains permanently at the center.

2. The second type of record will depend on the method of syphilis treatment used. Centers employing the five day slow intravenous drip technics (or other five day methods) will use the forms prepared by the group of clinics in the Midwest. Included in this set of forms is a

4. A fourth type of record may also be used, known as the follow-up card and prepared by the clinic or physician making the periodic post-treatment examinations. It will include a record of blood serology and other necessary physical examinations, as well as a statement of employment status. It will be filled out in duplicate, one copy going to the state health officer and one to the Machine Service Center.

Much thought is being given to the opportunities for education and re-



notification card bearing identification data to be sent to the Machine Service Center of the U.S.P.H.S. in Washington, D. C., when a patient is admitted to the center. The detailed data on treatment and reactions will be recorded on a "Consolidated Report of Hospital Abstract," which will be completed by the medical officer, checked for completeness by the record analyst and transmitted to the Machine Service Center.

Centers using multiple injection or fever therapy technics will transmit their data to the Machine Service Center on special forms designed for recording these methods.

3. The third type of record is a duplicate of the first page of the basic hospital record. It contains identification data and a brief summary of treatment. This form is sent to the state health officer when the patient is released.

habilitation of patients during their stay at the centers.

Being able to engage in normal physical activities during most of the period, the patients will find various carefully planned and supervised activities to assist them in making personal adjustment to the centers. Employment, educational and recreational programs will be among these.

In the direction of employment, for example, many of the simple routine jobs essential to the centers' operation, such as cleaning, housework and assisting in the kitchen, provide opportunity. Patients will be employed thus, at a reasonable rate of pay, to perform such tasks when possible. In addition to its value as a training measure, the work will provide patients with funds so that when they leave the centers they will be able to sustain themselves until they receive their first pay.

VETERANS ADMINISTRATION

Veterans Are Not Neglected



TUBERCULOSIS HOSPITAL, TUCSON, ARIZ.

THE Veterans Administration is so closely in liaison with the armed forces as to be essentially a war agency.

During the period of induction and training of selectees and volunteers that preceded the outbreak of the war, the medical and hospital service of the Veterans Administration cooperated with the War Department and the Selective Service System in arranging for physical and laboratory examinations and in furnishing hospital beds and wards.

The principal responsibility of the Veterans Administration, however, is the administration of benefits authorized by law for former members of the armed forces.

In dispensing these benefits, the Veterans Administration is brought into relation with thousands of households throughout the country. Yet, despite this, the general public appears poorly informed regarding the nature and scope of the functions of the Veterans Administration. It is with only one of these functions—hospital treatment and care—that this article is concerned.

In the District of Columbia and in every state except Rhode Island,

New Hampshire and Delaware, there is a hospital that is operated under the direct and exclusive jurisdiction of the Veterans Administration; and in the states of larger

CHARLES M. GRIFFITH, M.D.

Medical Director
Veterans Administration
Washington, D. C.

population, there are two or more such hospitals. Officially, they are called "facilities," to comprehend certain differences in organizational type. Thus, there are hospitals only; hospitals combined with a regional office, and hospitals that are a part of a domiciliary home.

The present total of such hospitals is 93, with a standard capacity of 62,749 beds. They are classed in three groups: general medical and surgical (51), tuberculosis (13) and neuropsychiatric (29). However, a number of them have a "mixed service," that is, of tuberculous and general medical and surgical patients, or of general medical and surgical patients with a large separate unit for psychotic beneficiaries; all of them are equipped to handle emergent admissions of any type.

Besides these hospitals proper, the Veterans Administration operates several special treatment units, in-

Psychotic patients particularly are benefited by occupational therapy work in shops and in outdoor agricultural activities. This patient is working in a shop at the Veterans Administration Facility, Perry Point, Md. Opposite page: Kitchen at the hospital for neuropsychiatric patients located at Coatesville, Pa.



VETERANS ADMINISTRATION

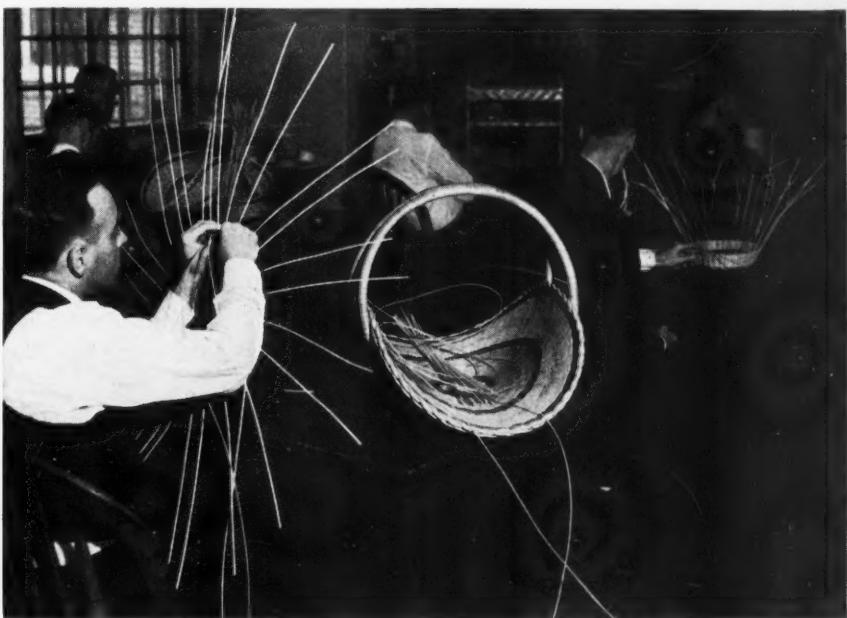
cluding tumor clinics, chest surgery centers, diagnostic centers, an allergy clinic and research units. The parent tumor clinic, at Hines, Ill., is one of the largest and best equipped in existence. Its equipment comprises 2 grams of radium element, radium in solution and apparatus for preparing emanations, and a battery of superficial and deep x-ray therapy machines. Dr. Max Cutler of Chicago is the consultant at this clinic, which is to be enlarged and housed in a new building.

There are subsidiary tumor clinics in five other cities in which treatment resources include radium element, radon and x-ray therapy.

To the 10 chest surgery centers are referred for major thoracic surgery patients in need of such intervention as determined by "surgical collapse boards," which are organized in every hospital for tuberculous patients.

The allergy clinic is located in the hospital at Pittsburgh, under the direction of Dr. Leo H. Cripe, consultant. Physicians from other hospitals of the Veterans Administration are provided courses of training in the diagnosis and treatment of allergic disorders, and allergens are prepared in the special laboratory that is a part of it.

The three diagnostic centers were



Basket weaving aids in rehabilitating patients at the Coatesville hospital.

created for the intensive study and observation of problem cases. Staffs of consultants of national reputation are attached to those centers, which are fully equipped with modern diagnostic devices.

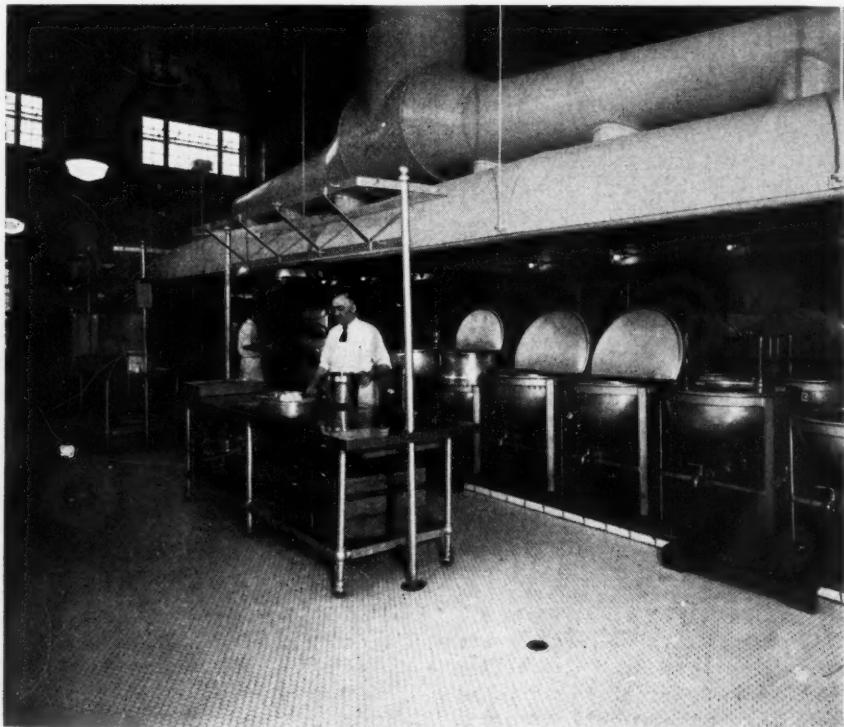
A research unit for cardiovascular conditions is located in the facility at Washington, D. C., and another, for clinical and laboratory studies in neuropsychiatry and for training in encephalography and electric shock

therapy, is housed in the large hospital for psychotic patients at Northport, Long Island, N. Y.

At the famous spa, Saratoga Springs, N. Y., a treatment unit of 47 beds was recently opened for beneficiaries suffering from arthritis and cardiovascular disorders. Balneotherapy is also available for patients of the Veterans Administration at the Army and Navy General Hospital, Hot Springs National Park, Ark.

The fairly wide use of other military and naval hospitals that had formerly been made for beneficiaries of the Veterans Administration, under certain conditions, has been in large part discontinued since the outbreak of the war. But the Veterans Administration continues to utilize beds in hospitals of the U.S.P.H.S. and in state and private hospitals under contract. In turn, the Veterans Administration furnishes hospitalization for officers and enlisted men of the Army and Navy in active service, for tuberculous beneficiaries of the U.S.P.H.S. and for claimants of other federal agencies.

Occupational therapy has had a high development in the hospitals of the Veterans Administration, especially in those for psychotic beneficiaries, where a varied assignment of projects in shops and in outdoor agricultural and allied activities is available. Physical therapy in all of its



VETERANS ADMINISTRATION

forms (diathermy, electrotherapy, the ultraviolet ray, hydrotherapy, heliotherapy and mechanical apparatus for peripheral vascular disorders) is energetically employed.

The full-time staffs of Veterans Administration hospitals are supplemented by attending specialists, and the patients are assured treatment and care of a standard comparable to leading civilian hospitals. The supplies and equipment of these hospitals are of the best approved types, and the diagnostic and treatment methods are kept at a high level.

Postgraduate training of professional personnel is given in the diagnostic centers and certain of the larger facilities, while official leave is granted personnel desirous of taking postgraduate instruction at hospitals and clinics not operated by the Veterans Administration.

The supply of textbooks and journals of medicine to all field stations is liberal. Affiliation of professional and semiprofessional personnel with national, state and county societies is encouraged.

All appointments of such person-

nel are made from certified lists of eligibles supplied by the United States Civil Service Commission and the comparative advantages offered by the other federal medical services, viz. the Army, Navy and Public Health Service, in respect to a commissioned corps, and liberality in retirement privileges are somewhat compensated for by the wealth of clinical material available in the service of the Veterans Administration.

The articles that are published quarterly in the *Medical Bulletin* of the Veterans Administration reflect the richness of that material.

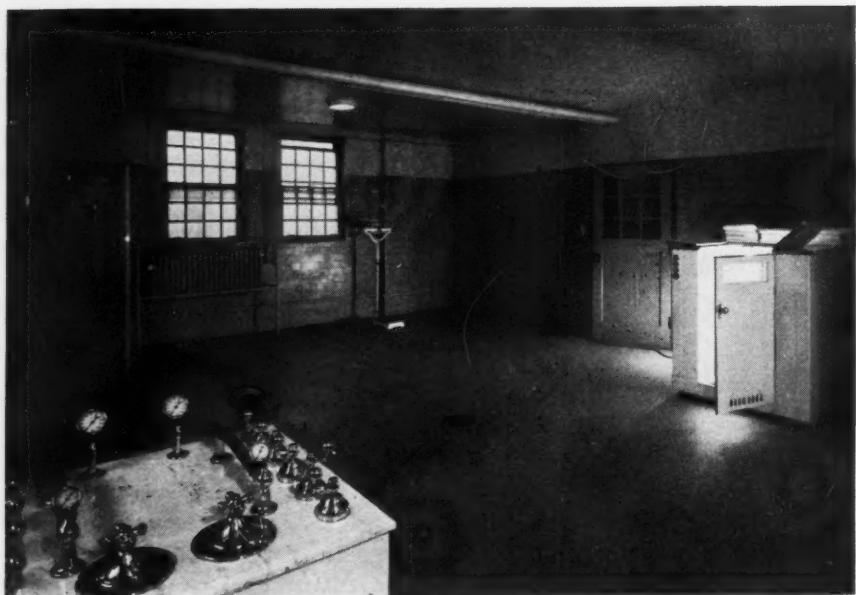
The responsibilities of the medical and hospital service of the Veterans Administration will, of course, be greatly increased through the necessity of providing hospitalization for the men and women who will be discharged or retired from the armed forces during the present war and who will at the time of such separation, or at any time thereafter, require treatment.

In 1940 the President approved the recommendation of the Federal Board of Hospitalization for a program of additional hospital construction which, distributed over a period of ten years, would eventuate in a reservoir of 100,000 beds for hospital treatment and domiciliary care. That program was based upon the estimated needs of what was then the approximate total of 4,000,000 potentially entitled applicants.

The huge expansion of the armed forces has forced a reconsideration of that 1940 program. Construction that had been scheduled for future accomplishment is being accelerated and, besides, additions to and alterations of existing hospitals are being made to supply another increment of beds.

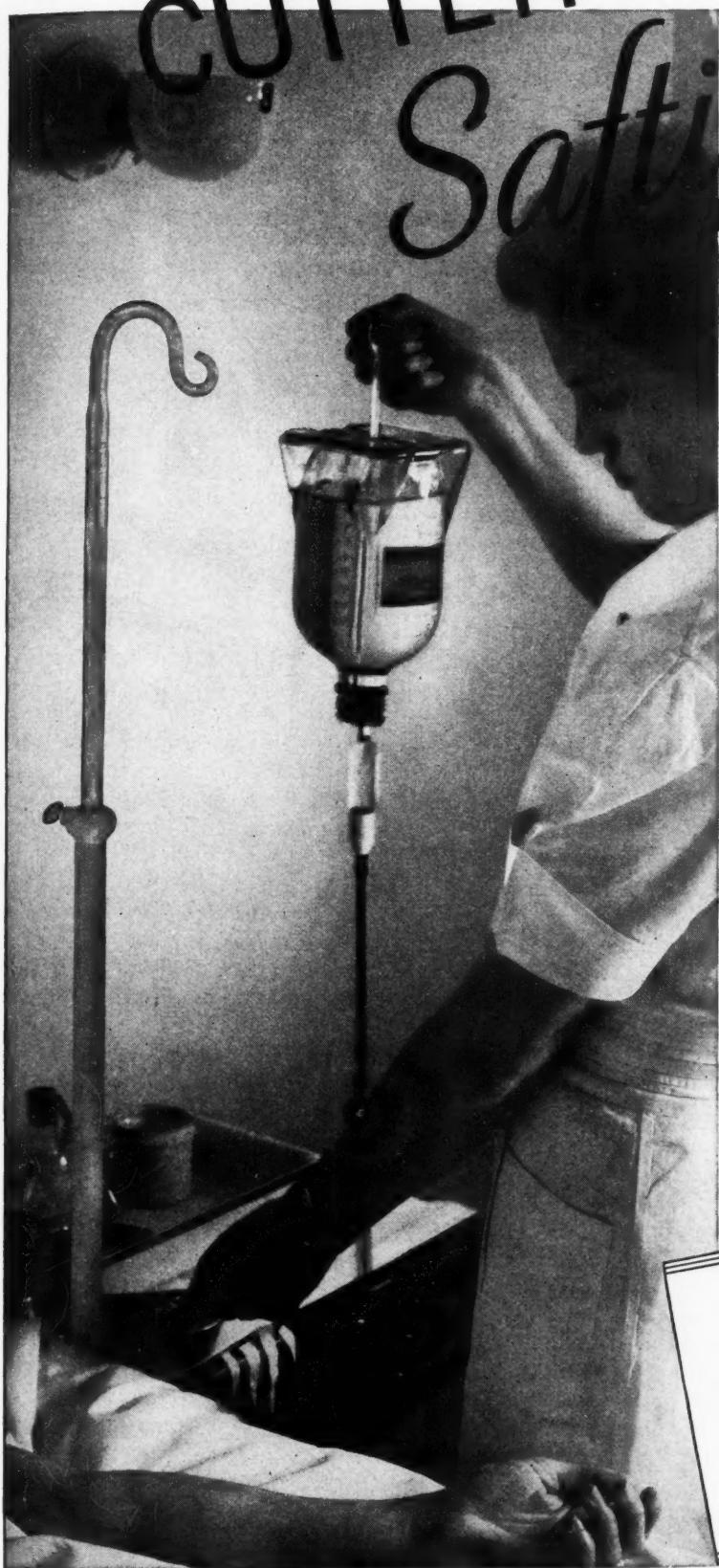
The Veterans Administration must also take into account the fact that the law authorizes hospitalization of former members of the armed forces not only for diseases or injuries incurred or aggravated in line of duty but also for those that are not "service connected."

The fact that the latter type of applicants will retain their potential eligibility for the hospital benefit throughout their lives necessarily influences plans for future hospital beds.



Above: The library is a pleasant retreat for patients at the Veterans Administration Facility for neuropsychiatric patients, Coatesville, Pa. Below: Hydrotherapy room at the Coatesville institution. Physical therapy in all of its forms is employed to bring patients back to health.

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INSTITUTES Will Foster FRIENDSHIP

MALCOLM T. MacEACHERN, M.D.

HEALTH work is probably the easiest field in which to establish good international relations. The benefits are so obvious and the means by which they can most readily be assured are so demonstrable, understandable and imitable that language and other cultural differences are less of a barrier than they are in most other fields.

This explains the enthusiastic endorsement by the Pan American Sanitary Bureau and the Office of the Coordinator of Inter-American Affairs of plans recently presented by the Inter-American Hospital Association to organize institutes for hospital administrators in the Latin American republics and the equally enthusiastic reception of the idea by government officials and hospital executives in the Americas to the south.

Three Institutes Are Scheduled

After an eleven weeks' tour of Mexico, Panama, Colombia, Peru, Argentina, Brazil, Puerto Rico and Cuba, visiting hospitals, medical schools and governmental bureaus to complete arrangements for the first three institutes, Felix Lamela, secretary-treasurer of the I.A.H.A., reported on his return on July 10 the definite scheduling and selection of committees for institutes at Mexico City from November 6 to 20; at Lima, Peru, from March 12 to 25, 1944, and at Rio de Janeiro sometime in November 1944.

Mr. Lamela also received requests for institutes from Chile, Brazil, Argentina, Cuba, Trinidad and other countries. Everywhere he went the plans for the institutes and other activities of the I.A.H.A. aroused the keenest interest and stimulated eager pledges of cooperation.

In the conduct of the institutes the

association will have the support of the Pan American Sanitary Bureau, the Office of the Coordinator of Inter-American Affairs, the U. S. Public Health Service, the Office of Civilian Defense, the U. S. Children's Bureau, the American Hospital Association, the American College of Hospital Administrators and the American College of Surgeons, and that of hospital, medical school, public health and other interested groups in each locality.

The consulting committee for each institute includes the heads of the cooperating bureaus and services in the United States and locally; the president and honorary president of the I.A.H.A.; the president of the A.H.A., and the president of the A.C.H.A. The executive committee for each institute will be composed of public health, university and hospital officials in the participating countries and Mr. Lamela.

In Mexico City, for example, the members of the executive committee will be the following: president, Dr. Gustavo Baz, secretary of public assistance; director, Dr. Salvador Zubiran, under-secretary of public assistance; associate director, Dr. Edward C. Ernst, assistant director of the Pan American Sanitary Bureau; general secretary, Dr. Federico Gomez, vice president, I.A.H.A.; treasurer, Dr. Demofilo Gonzalez, chief of the consulting staff, Infants' Hospital; assistants to the general secretary, Dr. Francisco Valdivia, director of the Center of Assistance to Infants, and Dr. Norberto Trevino, chief of the Commission for the Study of Hospitals, and Mr. Lamela.

Mexico City members of the consulting committee include leading health, university and governmental officials. The honorary president is

General Manuel Avila Camacho, president of the Republic of Mexico.

The institutes will follow the customary plan of formal, intensive courses of lectures and demonstrations in the many-sided aspects of hospital administration. Leading educators and hospital executives of the United States and the other American countries will form the faculties.

A translation system will be installed at each institute. Enrollment will, as in the United States, be limited to applicants who are hospital administrators or who hold executive positions in such institutions.

I.A.H.A. Formed in 1941

The I.A.H.A. was formed at the convention of the A.H.A. in Atlantic City in 1941, when some 29 representatives of Latin American countries attended an Inter-American Hospital Conference and spent the greater part of a week discussing ways and means of promoting closer inter-American hospital relations. As a result of the deliberations, the association was organized to promote the cooperation and collaboration of hospitals in the Americas (South, Central and North), to promote education and betterment in the organization and management of hospitals, to organize institutes and hospital congresses, to promote cooperation among national hospital associations of the Americas, to exchange information through publications and other means and to promote the granting of study and travel fellowships to hospital directors, physicians and technical personnel.

The present officers of the association, elected at the first official meeting, besides Mr. Lamela, are: president, Dr. Jose A. Jacome-Valderrama, Bucaramanga, Colombia; honorary president, Dr. Malcolm T. MacEachern, Chicago, and vice president, Dr. Federico Gomez, Mexico City.

The association, which maintains headquarters at 2000 Massachusetts Avenue, Washington, D. C., is operating now under a grant-in-aid made on March 26 by the Institute of Inter-American Affairs to the Pan American Sanitary Bureau for the purpose of assisting the I.A.H.A. Contributions by the A.H.A., A.C.H.A. and A.C.S. will be supplemented by membership fees which are expected eventually to support the association.

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ANOTHER WAY TO SAVE LIVES . . . BUY WAR BONDS FOR VICTORY

Play's the Thing for the nurses' morale

LOUISE E. SHAWVER

Social and Recreational Director
Michael Reese Hospital School of Nursing, Chicago

IF THE need for a social and recreational program in a school of nursing is realized as an educational endeavor at any time, in war time it becomes even more important as a solution to many student personnel problems.

Recreation furnishes many moral benefits. It has been scientifically proved that the temptations of youth to steal, to other crimes and passions, to wrong sex inclinations can be supplanted by a healthy program of activity and wholesome recreation.

As far back as 1927 the council on nursing and nursing education in the United States recommended that "schools should provide for extracurricular activities and consider them as much a part of the curriculum as classroom and ward instruction." Such a program becomes a part of any educational endeavor at any time inasmuch as through education we train for life and play is a part of life. Through education we promote growth; recreation contributes to the growth of mind and body—the mind, through attitudes, ideals and appreciations; the body, through muscular and physical development. Every dollar put into recreation becomes an attainment in education.

Play Relaxes Tension

Play pulls the trigger on tension. In these days of overtime, hustle and worry, recreation carries over a spirit, a humor, that will pervade working hours and help to find enjoyment in the small details of life. Play gives to youth experiences in cooperation through team games. In a team game we find the individual uniting with others and subjecting her will to that of the group. If you have ever "played ball" you know that you work for more than yourself.

Thomas Kernan, author of "Paris

on Berlin Time," says: "The defeat and occupation of France is unhappily largely due to the enervation of the French spirit in the school youth, who in peace time never spent the time to 'play ball' with vigor and who then deserted France on the field of battle and openly preferred 'slavery instead of combat.'"

In a world torn apart by war and hatred, it may not seem terribly important how one individual acts or does not react in relation to a group—but it is. We should be deeply concerned with something that will prepare our nurses for identifying the individual with the group, so that in this crisis it cannot be a matter of indifference to one what happens to another member of the team or to another nation.

The facilities that we have at Michael Reese Hospital School of Nursing in Chicago for carrying out a social and recreational program to meet this need are adequate physical equipment and a planned activity program. The physical equipment consists, first of all, of a housing unit or residence. This in itself inculcates and enriches the social objectives of any recreational program.

Within this residence we have a recreation room, equipped with livable furniture, fireplace, radio, ping-pong table, piano and sun porch; a gymnasium equipped with stage, loud-speaker system and piano, and a swimming pool with locker and shower rooms and beach chairs and tables for spectator comfort.

Tennis courts are adjacent to the building and are kept in excellent playing condition. In addition, we have three libraries: fiction, reference and record, the last named with more than 30 albums of classical music. There are two kitchenettes to every floor, fully equipped with dishes and cooking utensils.

Here, conversation, a form of recreation not to be overlooked, brews and the students learn in more ways than one "what's cookin'." We have a lounge on the main floor, furnished to provide a quiet few minutes between classes and hours on duty or to entertain friends and guests in an atmosphere of dignity and beauty. The auditorium in which large classes are held also serves for meetings of the student body as a whole, guest speakers and other special events, such as Friday night movies.

These facilities are perhaps atypical of most schools of nursing. However, an activity program well planned and directed need not be handicapped by lack of equipment. Many of the activities carried on in our program do not require the use of extensive equipment, although we do try to put our equipment to full use and to coordinate equipment and program.

Students Learn to Govern

Our planned activity program consists of "Over All," a cooperative government association, staffed by a student council and advised by a faculty council. The council meets the first Monday in every month to discuss class and student affairs submitted to their representatives, and on the second Monday in the month the student body meets as a group to discuss and vote upon matters previously taken up by the council. Here, opportunities for concomitant learnings in democratic living are many. In actual practice, our students learn what "of the people, by the people, for the people" means. We have a big sister-little sister program to ensure welcome and that necessary feeling of "belonging" to all incoming students.

Our musical program includes a glee club and orchestra and music

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**HOURS
8:30 -
10:30**



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appreciation and listener's hours. We have various types of parties: all-school parties for each incoming class and at Christmas; bi-monthly birthday parties, and, in the summer, picnics and outings. Our women's board generously gives student teas and

dinners; of the usefulness of food to any social program there is no doubt; it breaks social ice and gives social composure.

We have a women's athletic association, student staffed, which sponsors play nights with neighboring

schools and other schools of nursing; recreational swim nights at least once a week; seasonal games and inter-class tournaments in volleyball, basketball, baseball and tennis; various passive activities to meet the interests of the groups in the form of crafts clubs and drama clubs.

Then, as in every program, "man enters." Once a month the students sponsor an informal radio dance and extend invitations to the schools of our long acquaintance and, in recent times, to the service men in the various schools in Chicago. Any social outgrowth from these dances becomes an individual matter. Twice a year the students sponsor a formal dance, in the spring and in the fall. It's surprising what a long dress and a corsage can do for morale.

The only requirement in our activity program is the six months' course in physical education. Here are sown the seeds for future interest in the recreational program, and skills are developed to the extent that participation in games gives to the doer a sense of satisfaction and pleasure.

The results we may expect from an adequate social and recreational program in a school of nursing are found in the full personal life of each individual and in her progressive social outlook upon life. A full personal life results because the individual has been furnished with a wholesome outlet for her physical and emotional tensions; she has had an opportunity to build cultural appreciations and to develop her special interests and abilities outside of those that prepare her efficiently for her vocation; she has learned to participate in wholesome pleasures for sheer fun and enjoyment.

The student gains a progressive social outlook because of her experiences in learning to live well with others. She, of necessity, becomes tactful, courteous and cooperative in order to live and play with the group. She knows what it means to play fairly and ethically. Through the development of leadership and initiative, dependability and responsibility, she becomes a good citizen.

This may sound theoretical and even idealistic, but we must take advantage of the opportunities that lie within the scope of an adequate social and recreational program in a school of nursing. We must break ground where this is necessary.

Gauze Is Worth Saving

LOIS B. CORDER

Director of Nursing, University Hospitals
State University of Iowa, Iowa City

AT ALL times, but particularly during this unprecedented national emergency, hospitals are charged with the responsibility of operating patriotically, efficiently and economically. One of the many conservation measures employed that deserves special attention is the reclamation of bandages and gauze sponges. The following procedure has been put into operation at the University Hospitals, State University of Iowa.

Departmental Responsibility

Nursing:

1. Reclaim dressings from all cases except the following: gas infections, tetanus, tuberculosis and isolated.
2. Collect dressings and place in a fine mesh bag (red stripe).
3. Tie the top of bag securely with a string.
4. Place the mesh bag in a colored (brown) denim bag marked plainly "soiled dressings."

Housekeeping:

1. Collect bags and send them to the laundry.

Laundry:

1. Wash.
2. Place washed gauze on frames for stretching (assorted sizes) in "dry room" at 160°F. for 20 minutes.

3. Wrap in (paper) packages 6 inches in width not to exceed 5 pounds in weight.

4. Return to the housekeeping department.

Houskeeping:

1. Deliver dressings to the central surgical dressing supply room.

Nursing:

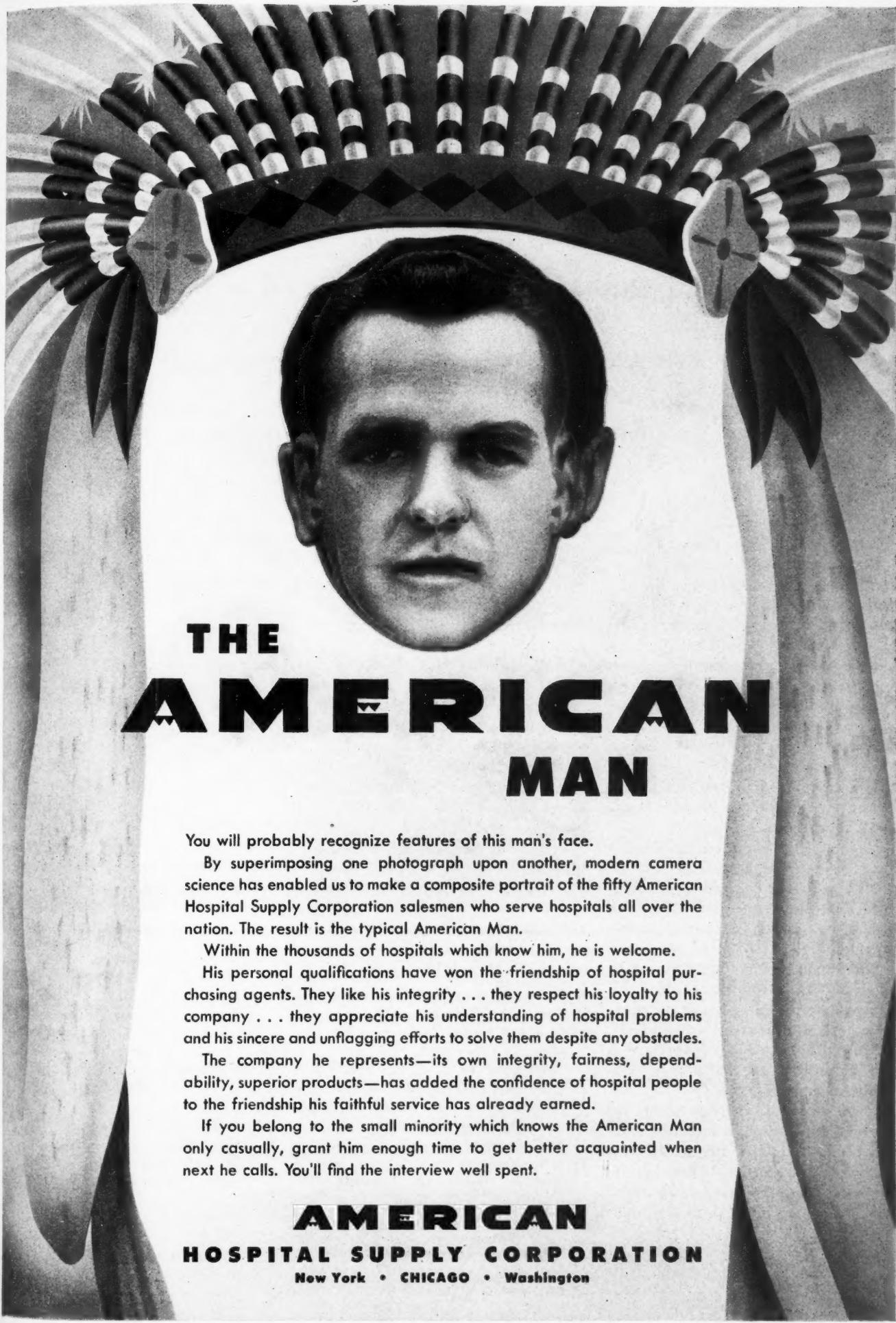
1. Weigh and record weight.
2. Autoclave as packaged at 18 pounds' pressure for forty-five minutes. Dry thoroughly.
3. Issue as packaged to selected convalescent patients for refolding and trimming.
4. Return to the surgical dressing supply room for final inspection, sterilization and reissue.

The accompanying record form indicates the amount of gauze saved in May and June 1942. The valuation for May for the total number of pounds saved was \$167.37, and for June, \$184.38. The rate per pound was reckoned upon the basis of the cost of new gauze. Inasmuch as the cost of reclamation is minor and limited chiefly to the cost of laundering, which is \$0.013 per pound, the savings represent about 100 per cent.

In certain instances preference has been stated for the washed gauze because of its softness.

MONTHLY WEIGHT REPORT OF RECLAIMED GAUZE - 1942

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	TOTAL NO. OF POUNDS
JAN.																																
FEB.																																
MARCH																																
APRIL																																
MAY	21				27				26		34			17											61						199	
JUNE					37			28			34		20	26			22		23	14		17								219		
JULY																																
AUG.																																
SEPT.																																
OCT.																																
NOV.																																
DEC.																																



You will probably recognize features of this man's face.

By superimposing one photograph upon another, modern camera science has enabled us to make a composite portrait of the fifty American Hospital Supply Corporation salesmen who serve hospitals all over the nation. The result is the typical American Man.

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The company he represents—its own integrity, fairness, dependability, superior products—has added the confidence of hospital people to the friendship his faithful service has already earned.

If you belong to the small minority which knows the American Man only casually, grant him enough time to get better acquainted when next he calls. You'll find the interview well spent.

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SURGICAL INSTRUMENTS

Should the small hospital provide them?

Should each surgeon provide his own? Or share with others?

What about specialized instruments, i.e. brain or eye surgery?

Is it a good idea to lend or rent special equipment to patients? To doctors?

IN THE small hospital, who should provide the surgical instruments, the hospital or the surgeon? This question has bothered many small hospitals for years. If the hospital provides them, the cost to the hospital may become a serious item, doctors may be more careless with the instruments, their demands may be excessive and the subject may be a source of more or less constant irritation.

If, on the other hand, each doctor must provide his own, the cost to the individual doctor becomes large; more storage space is required; some needed instruments may be too expensive for any of the surgeons to purchase, and time is lost keeping track of a larger number of instruments.

In response to an inquiry sent by The MODERN HOSPITAL to 50 small hospitals in various parts of the country, replies were received from 13. While the sample is small, there is no reason to think that it is not reasonably representative.

Nine of the 13 correspondents believe that the hospitals should provide all of the standard, frequently used surgical instruments. Three prefer to have the surgeons provide them while one respondent thinks the matter must be decided by each individual hospital.

The following reasons were specified to support the majority opinion: (1) this saves time (6 replies); (2)

instruments are always ready for emergencies (8 replies); (3) it is impossible to keep doctors' instruments separate unless they are marked (3 replies), and (4) uniformity of instruments is desirable (2 replies).

The following reasons were each mentioned once: sterility, avoidance of discord when doctor-owned instruments are mixed, a valuable help to visiting doctors, few surgeons have sufficient instruments to do two major operations successively and as a result they borrow instruments, which creates confusion.

In view of the present shortage of nurses and other employes, considerable stress was put upon the sub-

stantial amount of time required to sort individually owned instruments after a big morning schedule.

A method that enables hospitals to afford good standard instruments and even some of the more specialized ones is suggested by Amy J. Daniels, superintendent of Elkhart General Hospital, Elkhart, Ind.

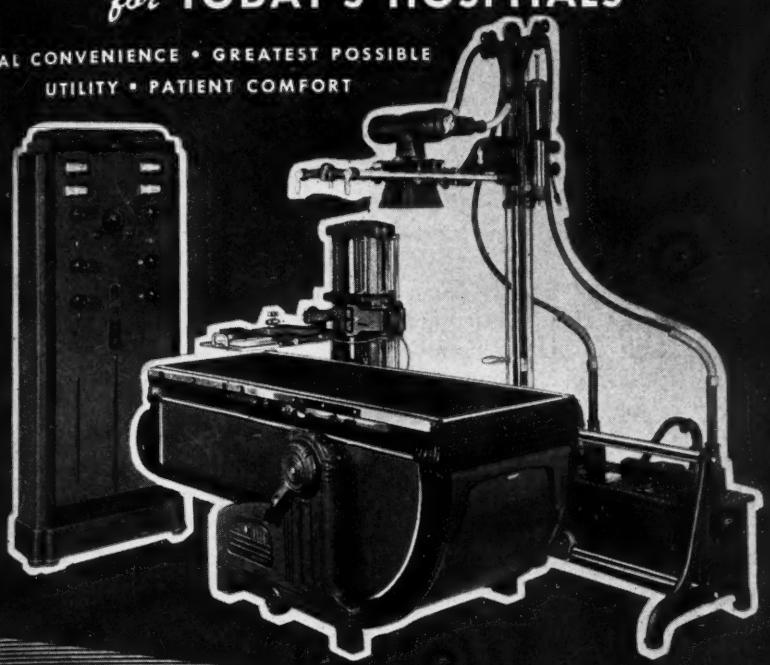
"Have every surgeon donate \$1 after a major operation and 50 cents after a minor operation to a fund to be used for purchasing, replacing and repairing instruments. No surgeon, no matter how Scotch he may be, will complain about handing over his bit to the operating room supervisor after each operation."

THANKS TO THESE CORRESPONDENTS

HOSPITAL	SIGNED BY	BEDS
Community Hospital, Sandpoint, Idaho	Pearl A. Stackhouse, R.N.	30
Clarksdale Hospital, Clarksdale, Miss.	Louise Francis	32
Muhlenberg Community Hospital, Greenville, Ky.	Josephine Lynch	34
Sioux Valley Hospital, Cherokee, Iowa	Grace Heller, R.N.	35
Fort Pierce Memorial Hospital, Ft. Pierce, Fla.	Ruth B. Dunning	50
St. Catherine of Sienna Hospital, McCook, Neb.	Sister Mary Jane	50
Kelley Memorial Hospital, Kingstree, S. C.	Dr. E. T. Kelley	50
Huntsville Hospital, Inc., Huntsville, Ala.	Agnes P. McGinley, R.N.	70
New Orleans Hospital and Dispensary, New Orleans	Burton M. Battle	86
Citizens Hospital, Talladega, Ala.	Claude Sims, R.N.	87
Elkhart General Hospital, Elkhart, Ind.	Amy J. Daniels, R.N.	100
Free Hospital for Women, Brookline, Mass.	Margaret Copeland, R.N.	101
Brokaw Hospital, Normal, Ill.	Helen Biermann, R.N.	105

STANDARD 200 MILLIAMPERE UNIT for TODAY'S HOSPITALS

REAL CONVENIENCE • GREATEST POSSIBLE
UTILITY • PATIENT COMFORT



FOR the greatest possible convenience and utility, we recommend the Standard *all-purpose* 200 Milliampere Unit. This up-to-date equipment includes the Model F combination fluoroscopic and radiographic tilting table, the Standard 200 Milliampere Generator with the space-saving Wall Mounted Control Panel.

The Model F is a completely enclosed, all-position table, with a streamlined top and removable plastic panel. The tilting movement is spring counter weighted and automatically locks securely in any desired position. Note the self-locking hand crank mechanism—motor driven model also

available. A folding step permits patients to mount or dismount with ease; it recesses when not in use.

The screen staging and fluoroscopic mechanism provides a thoroughly counterbalanced full table length travel, and is fitted with a Patterson type 'B' screen and mountings. The high speed Bucky diaphragm is spring mounted and maintains a uniform distance between table top and grid.

This popular Unit was designed for heavy duty in busy laboratories. Complete specifications, descriptions and quotation will be supplied promptly on request.

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Pioneers in X-Ray Equipment
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Most of the other hospitals, apparently, believe that when the hospital "provides" it should also pay the cost.

This discussion has all concerned the standard, frequently used instruments. For more specialized instruments, such as those required in brain or eye surgery, all but one of the hospitals agree that the surgeon himself should provide them. Even this one hospital qualifies its statement by excluding the "pet instrument wanted by a particular surgeon."

There Are Disadvantages, Too

Most of the hospitals acknowledged that there are certain disadvantages in having instruments owned by the hospital. The expense of initial purchase and of replacement and additions was mentioned several times. Three hospitals stated that quite an effort is required to keep on hand all of the various types of instruments preferred by different surgeons.

Other points mentioned once each were: need for haste in cleaning instruments to get them ready for another surgeon; complaints that hospital-owned instruments are not kept in perfect condition; observation that surgeons do not take as good care of hospital-owned instruments as they do of their own and yet complain about them and that surgeons demand more instruments when they do not pay for them.

The hospitals were also asked whether they had any arrangements for sharing doctor-owned instruments in case of emergencies or if staff members leave the hospital. Three did not reply and seven said that they had no arrangement. One

reports that it "discourages surgeons from buying their own instruments.

"If they already have instruments, the hospital should call a special meeting and ask the doctors to pool their instruments so that the hospital can make up several good sets for major work, minor work and emergencies. If a doctor has his own instruments and leaves for war service, he should hand them over to the hospital or take them home for safe-keeping."

Another hospital reports that the surgeons pool their instruments, sharing equally in buying new ones and also in the cost of repairs. Doctors leaving for war service have left everything at the hospital to be used by other staff members.

"We have a rather unusual situation at our hospital," is the explanation given by Grace Heller, R.N., superintendent of Sioux Valley Hospital, Cherokee, Iowa.

"The instrument cabinet is never locked. Any of the doctors may use the instruments at any time. The doctors who have left for service left everything at the hospital to be used by other members of the staff. So in regard to the surgical instruments at our hospital, we have no problem."

Lending Equipment to Patients

Some hospitals have made arrangements to lend equipment to patients when they go home, to physicians or to persons ill at home who have not been hospital patients. These arrangements are not generally approved by the small hospitals replying to our inquiry. Twelve said a hospital should not lend equipment to home-going patients.

Only one supported this idea and

limited it then to items that cannot be purchased at local stores. For physicians, the response was somewhat more generous. Eight said "No"; three said "Yes, in special cases," and two said "Sometimes it is necessary but the practice should be discouraged."

For persons who are sick at home there was also a 12 to 1 negative reply. But one hospital makes exceptions for wheel chairs, back rests and oxygen resuscitators and another will lend equipment if extra equipment is available.

Encourage Patients to Stay Home

One hospital that was not among those queried recently sent information to *The Modern Hospital* about a regular service that it provides for the care of the sick at home. An announcement by the Berkeley General Hospital, Berkeley, Calif., reads as follows:

"One method of helping to overcome the increasing shortage of hospital accommodations and the shortage of trained hospital manpower is to encourage as many patients as possible to set up hospital facilities at home wherever possible. Increased population has so overtaxed hospital capacities, that only the most seriously ill should apply for hospital admission.

"Fracture patients and others facing long periods of convalescence should be sent home from the hospital as soon as possible to release beds for others. Surplus bedside equipment is available at the Berkeley Hospital for setting up hospital facilities in the homes of convalescent and less acutely ill patients.

"Available for home rental are: hospital beds, fracture beds, crank beds, folding bed cradles, mattresses, commodes, invalid walkers, bed sides, Balkan frames, Bradford frames, bedside tables, orthopedic weights, wheel chairs, splints and other bedside equipment."

Asked how such loans or rentals can be controlled to protect hospital property from loss or damage, six hospitals did not answer and two stated discouragedly that it was impossible. Three suggested a substantial deposit in addition to the rental charge; one requires approval of a board member and impresses on the borrower that this is an important matter, and one merely keeps a record in a book.

WRITE FOR YOUR VOLUME INDEX

If you bind your volumes of *The Modern Hospital*
you will want the index to Volume 60, covering issues
from January through June 1943. War-time paper
rationing prevents its publication in the magazine.
Write to 919 North Michigan Ave., Chicago, Ill.

...accidents due to slips and falls on walkway surfaces reduced approximately 95%

The [REDACTED] Hospital

SUPERINTENDENT

May 10, 1943

Walter G. Legge Company, Inc.
11 West 42nd Street
New York City, N. Y.

Gentlemen:

As the Chairman of a Sub-Committee on [REDACTED] Safety and Walkway surfaces of the [REDACTED], it is important to follow every rule of safety on all walkway surfaces, for the conservation of manpower.

In our report of 1940, our records showed that approximately 55% of total hospital accidents were due to slips and falls on slippery walkway surfaces. These accidents have been reduced about 95%, representing a great reduction in accidents on Casualty Insurance reports through use of your non slip floor polishes.

This accomplishment should merit the attention of every hospital - more especially since floor maintenance materials were reduced about 25% and labor costs on floor maintenance about 50%. In addition to this we find excellent floor appearance, effective floor preservation and the elimination of undue water spotting and marring on all floor surfaces.

Having learned of your activities with the National Safety Council and your good work in overcoming slip-hazards on walkway areas in war industrial plants throughout the country, in addition to your efforts in the elimination of static electricity problems for the conservation of manpower, I trust this report may be beneficial to others who are safety minded in hospitals.

Yours very truly,

[REDACTED]
Superintendent

The name of the writer of this letter will be furnished upon request.

The following Legge Products have been tested, approved and listed under the Reexamination Service of the Underwriters' Laboratories, Inc.:

SAFCO - A non-slip polish made especially for Asphalt Tile.

LECO - A non-slip polish for linoleum, rubber, cork, wood, linotile and floorings in general.

FLOOR SHINE - Essential for the continuous maintenance of floors treated with SAFCO or LECO. Also serves as a combined non-slip polish and cleanser for terrazzo, marble, cement, hard tile, travertine, etc. It cleans the floor and at the same time leaves it non-slip with half the labor.



WALTER G.

LEGGE COMPANY, INC.

11 W. 42nd ST., NEW YORK, N.Y. • 540 N. MICHIGAN AVE., CHICAGO, ILL.

PIN TO YOUR LETTERHEAD

and mail for complete information. No cost or obligation.

WALTER G. LEGGE COMPANY, INC., 11 W. 42nd St., New York, N. Y. or
540 N. Michigan Ave., Chicago, Ill.

Please send complete information on the use of your products for our floors. We have approximately _____ sq. ft. of the following types of flooring.

- | | | | | |
|---------------------------------|-----------------------------------|---------------------------------------|----------------------------------|--------------------------------------|
| <input type="checkbox"/> Cement | <input type="checkbox"/> Linoleum | <input type="checkbox"/> Asphalt Tile | <input type="checkbox"/> Wood | <input type="checkbox"/> Rubber |
| <input type="checkbox"/> Cork | <input type="checkbox"/> Terrazzo | <input type="checkbox"/> Mosaic | <input type="checkbox"/> Ceramic | <input type="checkbox"/> Quarry Tile |

How can we dare to make a claim like this for Legge Non-slip Floor Treatments? We don't! We merely quote from the report which is reproduced in full at the left.

Perhaps you have avoided the use of all kinds of floor treatments because you consider them slippery and unsafe. Now, with LEGGE PRODUCTS, you can protect your floors against undue wear, greatly reduce maintenance costs . . . and at the same time actually increase non-slip protection. Underwriters' Laboratories state in their report, "For all floor materials for which these products* are recommended by the manufacturer, their application and proper maintenance renders the floor surface less slippery than the untreated floor material."

Costs Also Reduced

But LEGGE PRODUCTS offer you even more advantages. As stated in the third paragraph of the letter, the use of LEGGE PRODUCTS has saved 50% of hard-to-get maintenance labor and also reduced material costs as much as 25%. What's more, the floors look better and wear better than ever.

You will want complete information on these time-saving, money-saving, accident-saving floor treatments. Check your type of floor in the coupon below, pin to your letterhead and mail.

Why the Trouble Started

Some Case Histories

WHAT are some of the situations that develop in the hospital picture, which, if permitted to continue, may threaten the progress of the institution and bring disrepute to an otherwise good name? Inasmuch as such situations are engendered principally by matters of policy, they involve the trustee and his concept of what does and what does not constitute his precise functions.

When carefully analyzed, the condition is frequently found to be one of long standing. If it was recognized at all no member of the board was willing to take a firm stand. The excuse was that, "It would cause feeling." Other times a situation is borne which is acknowledgedly bad but, "After all, we are a charitable organization and does charity not begin at home?"

Finally, ineffectual management may be traced directly to intervention on the part of the president or some member of the board, who has overlooked the unassailable fact that there can be but one executive head to an institution.

Bad Habits Grow Worse

Few such unfortunate situations are precipitated deliberately. They represent bad habits that have been permitted to grow steadily worse. Contributing factors for which allowance must be made are ignorance, indifference, unsound thinking and poor planning. Last, but not least, there is lethargy, for it is human nature after all to choose the easiest way.

Few hospitals escape all of these pitfalls at one stage or other during their histories. The extent of the damage incurred depends upon how soon the situation is relieved and how promptly action is taken to remove the cause.

While the situations presented parallel those in real life, these case histories are wholly fictional.

RAYMOND P. SLOAN

Because the trustee may be quite unmindful of bad tangles in his institution that need unraveling as part of postwar planning, several case histories are given with accompanying explanations of how trouble might have been avoided. It is suggested that these be checked carefully to determine whether there is anything in them that sounds familiar.

Case History No. 1. This medium-sized hospital had for years enjoyed an enviable reputation in a rural community of approximately 80,000. Much of this was due to the skill and unquestioned popularity of one doctor who headed the staff and who contributed largely to the unusually high rate of occupancy.

In consequence, this man dominated the situation. Any efforts taken to enlarge the attending staff or increase the courtesy staff were met with stubborn resistance. "Was not the hospital doing well? Was he not bringing in all the patients it could care for comfortably?" The answer was unmistakably, "Yes." But what of the future? He could not be expected to keep up the pace at which he was working. He had an answer for that, too. His son had finished his internship and it was the father's wish that he succeed him.

This wouldn't have been so bad either had the boy possessed the sterling characteristics and abilities of the parent but the consensus was that he did not. In the meanwhile, bad feelings were being engendered among the staff. Strained relations existed between the chief and the administration. The community, in turn, plainly denounced the hospital for its "closed" policy.

Despite repeated warnings by the administrator the board was disinclined to take any action. The doctor had many friends, and his displeasure or withdrawal, it was felt, would cause irreparable injury to the hospital. What the trustees failed to realize was that their own unwillingness to assume authority and to observe sound policies was equally damaging.

The hospital census fell off sharply. Patients were going elsewhere. Still the board hesitated and in the interim the situation went from bad to worse. The administrator, discouraged by his inability to get anywhere, accepted a better opening in an adjoining state.

Not a Chip Off the Old Block

This was only the start of a series of unfortunate events. The head of staff suffered a stroke. The son in whom he had placed such hopes started drinking and his resignation was demanded. In the meanwhile rumors about the hospital spread throughout the community, some of them based on truth, others obviously malicious.

There was one solution, complete reorganization throughout—reorganization of the board, reorganization of the medical staff and the establishment of a public relations program to regain the good will that had been lost.

This has now been successfully accomplished by the new administrator and the hospital is slowly regaining its good name. Yet all this disturbance might have been avoided had the board been willing to face the situation squarely.

QUESTION: Who is responsible for the policies of the professional standards of the hospital, the board of directors or the chief of staff?

ANSWER: The directors.

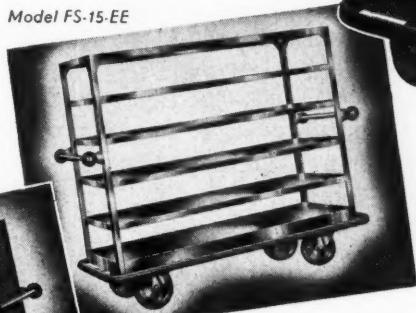
"CONQUEROR" War Model FOOD CONVEYORS

• You can maintain maximum wartime efficiency with these well-designed and sturdily-constructed food conveyors — now available on suitable priorities because they are made of less-critical materials. All are built to give long and satisfactory service. Rubber-tired casters, instead of standard plastic wheels, are optional for hospital use only. Choice of models to suit specific needs.

Model FS-15-EE

Right: TRAY SERVICE TRUCK

Galvanized steel construction. Six shelves reinforced and riveted to uprights. Other models with four and five-shelf capacities.



Left: TRAY CONVEYOR

Electrically-heated conveyor of galvanized steel construction. Keeps food hot and palatable. Drop-type doors with counterbalancing device. Other models of different capacities and shelf arrangements.

Model POR-100

Above:

Electrically-heated FOOD CONVEYOR

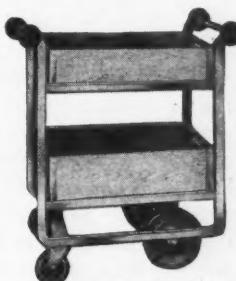
Body made of high-grade galvanized steel, attractively finished in baked-on enamel. Top deck, end shelves and food containers of porcelain-enamelled steel. Disappearing-type doors with recessed handles. Continuous bumper around base of hard, water-and-flame-proof felt. All containers suspended in one large common well heated by space heaters connected to 3-way switch adjustable to "high," "low" or "medium." Model illustrated above can feed forty-five to sixty patients. Other models available with different top arrangements for various serving capacities.

Left: NOURISHMENT TRUCK

Solves the problem of conveying bulk quantities of fruits, juices and other liquids, whether hot or cold. Removable metal vacuum cans held firmly in place by fastening device. Wooden boxes on lower shelves hold bushel of fruit each. Framework and shelves strongly made of high-grade galvanized steel. Model illustrated has three ten-gallon and two five-gallon cans. Other models available with cans of various capacities — and top arrangements to suit particular requirements.

Right: DISH TRUCK

Dish trucks with steel framework available only to the Armed Services. Otherwise obtainable in wood only. Two swivel and two stationary ball-bearing casters. Felt-bumpered push-handles at both ends. Removable wooden trays.



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"CONQUEROR"

Equipment for Hospitals in a New World

Send for our illustrated folder describing this equipment in detail. Shows top arrangements of eight different models of electrically-heated food conveyors with various serving capacities.



Case History No. 2. Up to eight years ago this institution was merely a convalescent home for cardiac cases conducted comfortably by a matron and a board of managers, principally composed of women. A change in management brought to the "home" a young hospital administrator who immediately began reorganizing it on a sound business basis, at the same time showing the board what steps should be taken to give it a higher professional standard. Among other improvements made to the physical plant was a new building with modern equipment.

These changes brought much acclaim from both the constituents of the institution and the general public. It looked as though the "home" had embarked on a new era of broader service.

The first indication that all was not well was action taken by the trustees in placing the president on its pay roll. Since the death of her husband this elderly woman had been more or less adrift and, in addition, had suffered financial reverses. Her appointment was in recognition of many years she had served the "home." This decision was made despite the presence of three hard-headed business men in the group.

The inevitable happened. The administrator resigned to accept a bet-

ter position elsewhere. At this point the board muffed it the second time. Instead of replacing the administrator with another trained person and voting from its resources a retirement or pension fund for the president of its board to whom they would show charity, it proceeded to give her the title of superintendent. In consequence, an institution that had made rapid professional strides under trained supervision is back to where it started. It is again a "home" supervised by a matron.

This case history may be summed up by two questions and answers.

QUESTION: *Should charity begin at home?* **ANSWER:** *Not when it affects the welfare and physical progress of those who are ill.* **QUESTION:** *Should the president of a board assume responsibility for the executive management?* **ANSWER:** *No, unless he takes the necessary training to qualify for the position.*

Case History No. 3. Under the management of a well-known administrator this hospital of 450 beds had won acclaim as one of the best in its state. The reason was the fine relationship that had existed between the superintendent and his board, and between the superintendent and his staff and department heads.

This situation had been going on for twenty years and there would be

no incident to form the basis for this case history were it not for the increasing intervention in administrative affairs on the part of the president of the board.

Well in his seventies, this gentleman, who through the years had considered the hospital his hobby, had now, in lieu of other personal interests, adopted it as his business. Much of his time was spent in the building where he evinced a growing inclination to reach his own conclusions and to make decisions that were not within his jurisdiction.

Such poor judgment would he manifest at times that even his friends were inclined to attribute it to senility. Yet because of his years of faithful service and his financial contributions, the board was hesitant about making an issue of it.

It is easy to see how demoralizing his attitude was to the entire staff. Recently, the situation reached the point where it became untenable to the administrator, and it was only through the influence of his friends that he was persuaded to refrain from resigning.

The administrator went directly to the gentleman in question, explained the situation to him frankly and endeavored to show him that his action was contrary to all ethics of sound management. This was met with a complete disavowal of any intentions to assume unlicensed authority and considerable surprise that his actions had been so interpreted.

While some temporary relief has been accomplished, it is evident that the unfortunate condition will continue until a permanent panacea is effected.

QUESTION: *What age limit, if any, should apply to the president and other officers of a hospital?* **ANSWER:** *There should be an age limit, unquestionably, and although one man may be in good physical and mental condition at 70 while another starts to fail at 60, it would be equitable for all concerned to make 70 the age limit.*

These are typical of the situations that are threatening some of our voluntary hospitals. What must be done can be accomplished now better than ever before. Courage, conviction and faith are as necessary on the home front as elsewhere. Then, when the word is given to proceed, there can be no question in what direction we shall be heading.

WOMEN'S SERVICE GROUPS

Fruits of Their Labor

City friends used to chuckle over the Iowan's tale of the simple little Iowa town where the social season and the canning season coincided.

When the tall corn ripened, temporary workers were needed for the town's one industry, the canning factory, and who were these factory hands? They were the merriest, chattiest crowd you could imagine and they included the mayor's wife, the doctor's wife, the banker's sons and daughters. Nobody would think of leaving town during the Season, the Canning Season.

Now this local peace-time village custom must become a wide-spread wartime movement. Take California, for instance, where the peach, pear and tomato crops ripen almost simultaneously. No Dust Bowl migrants are available in 1943 so who must step into the breach? That's right, the mayor's, the doctors', the bankers' wives and children over 16.

Trust Children's Hospital of the East Bay, Oakland, to see the possibilities in this trend, for the women's groups in that hospital never miss a bet.

"While these patriotic citizens serve so that the Army and citizenry can be fed, they are paid regular wages," Mildred L. Laird points out. "What a splendid way to make money for the hospital!" she tells hospital friends and patrons. "Persuade the members of your branch to join you in this new type of money-raising project and urge them to stay on the job regularly throughout the canning season."

• •

When Donation Day comes around next November, the storeroom shelves at Presbyterian Hospital of Pittsburgh should be bulging. Mrs. W. M. Aldrich, secretary of the Aid Society, suggested to all victory gardeners in the vicinity that when planting and tending their gardens they set aside one row for the hospital.



“Doctor likes that Miller Anode tubing”

Although it has been on the market only a few years, Miller Anode-Latex Intravenous Tubing has won wide acceptance, and replaced old-fashioned varieties of tubing. It is bringing to intravenous work extra ease and an additional safety factor never possible with the tubing of old.

For instance, it is perfectly uniform, silky smooth inside and out. Its smooth inside surface aids in securing complete sterilization, thus reducing danger of reactions. It is free from sulphur, so never needs special cleansing before use. It is translucent to provide quick check on the flow at all times. You can see it is clean, because you can see through it. And, if properly used, it will outlast other types by many trips to the sterilizer.

Due to heavy calls from the armed forces, the supply has not always been sufficient to meet growing home front demands. But today,

with ever-increasing capacity, more will be made available—enough so that Miller Intravenous Tubing soon can be on hand in *every* hospital, ready to serve on the home front as widely as it has been serving on the war fronts.



*Miller Rubber Sundries Division of
The B. F. Goodrich Co., Akron, Ohio*

Miller
Rubber Sundries



We Converted From Oil to Coal

EARLY in 1942 it became apparent that all oil-burning plants would be required to convert to coal, if possible, in order to ensure continued operation and to help in the war effort.

The plant at Beth Israel Hospital, Boston, consists of four 187 h.p. horizontal tubular boilers, engine, generator, refrigerating plant, air compressor and feed, vacuum, brine and oil pumps. In 1935-36 three boilers were converted to oil. Number 4 was left with hand stoker grates intact and had not been used since, as two boilers will carry the maximum load. It was decided to start burning coal in this boiler without delay.

We considered buying an automatic stoker. These ranged in price from \$2500 to \$3200 and delivery could not be promised in less than two or three months. Inasmuch as our boilers were originally fitted with hand stokers, which with careful firing do a good job, we abandoned the idea of the purchase of an automatic stoker as conversion to coal will be only for the duration of the war or until such time as oil is again plentiful. A stoker would not enable us to reduce our crew and the expense or delay could not be justified.

Number 4 boiler was overhauled, furnace walls were repaired and the height of the bridge wall was lowered 18 inches in order to give greater area for the combustion of the gases. Broken grates were replaced, a new blowdown pipe and valve were installed and all other valves were overhauled.

The coal bunker, which has a capacity of 120 tons and had been used for storage, was cleaned out and a supply of coal was put in. The platform scales had been disassembled and stored and required a number of new parts before they could be placed in working order. These could not be obtained for eight months, and our only means of estimating the amount of coal consumed would be capacity of the coal car.

C. ROBERT KINNEY

Maintenance Superintendent
Beth Israel Hospital, Boston

On June 15, 1942, number 4 boiler was placed in operation. This, however, was apparently insufficient to comply with the demands of the Fuel Coordinator's Office. An engineer from Washington visited us, and after his investigation we received an order to convert another boiler to coal. We, therefore, proceeded to convert number 3 boiler.

When the boilers had been converted to oil seven years ago the stoker parts that were usable had been saved. The original front plate, with fire and ash pit door openings, had not been removed but had had a circular opening cut in the center for the oil burner and air register. It was, therefore, a simple matter to bolt a plate over this opening and put on the old doors. The ash pits had been filled with cinders and old brick and covered with loose brick.

It was necessary to remove the fill, repair furnace walls, build a new bridge wall and front door arches and install the hand stoker grates. A few new parts and new grate sections had to be purchased, which fortunately could be obtained without any trouble.

The cost of the furnace work and grate installation, together with the new grates and other required parts, amounted to \$600. This boiler was placed in operation in February 1943.

We now have a quite flexible set-

up, i.e. two boilers fitted to burn coal and two to burn oil. We have a reserve of 400 tons of coal in the yard for emergency use only in addition to the bunker.

When one of the coal-fired boilers is off for cleaning or repairs we use one of the oil-fired boilers with the other coal boiler for about eight hours a day when the load is heavy. For this purpose, or any other emergency, we keep a minimum of 10,000 gallons of oil in the tanks.

The boilers are equipped with the following instruments: one flow meter for all boilers, a CO₂ recorder so connected as to be used on any one boiler, a recording flue gas pyrometer for each boiler, a draft gauge for each boiler, oil meter and scales for weighing coal. We are, therefore, able to check our results accurately. With careful firing we have practically no smoke.

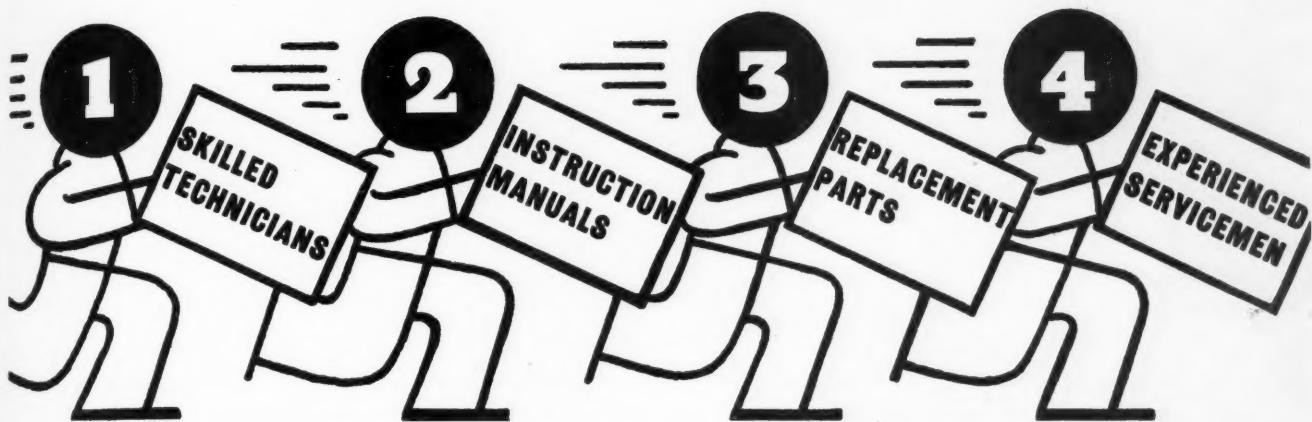
Our power plant personnel comprises three engineers, one for each shift, a relief engineer and one fireman for the day shift. One of our chief difficulties is the problem of obtaining engineers who are willing to handle coal.

During the month of March we burned coal exclusively and had an excellent opportunity to observe results and compare costs with those of the previous year when we used oil exclusively. The accompanying table shows that under our conditions coal has cost more than oil and has increased the work of the power plant personnel.

Comparative Costs of Burning Oil and Coal

	March 1942 Oil	March 1943 Coal
Lbs. steam generated per month	4,798,500	4,720,000
Evaporation from and at 212°F.	15 lbs.	10.25 lbs.
Boiler efficiency	79.38%	68.76%
CO ₂ in flue gas	12%	15%
Temperature of flue gas	450-550°F.	450-550°F.
Cost of fuel burned	\$1569.62	\$2283.40
Kw. hours of electricity generated	43,300	33,700
Kw. hours of electricity purchased	16,860	16,630

HOFFMAN KEEPS 'EM RUNNING

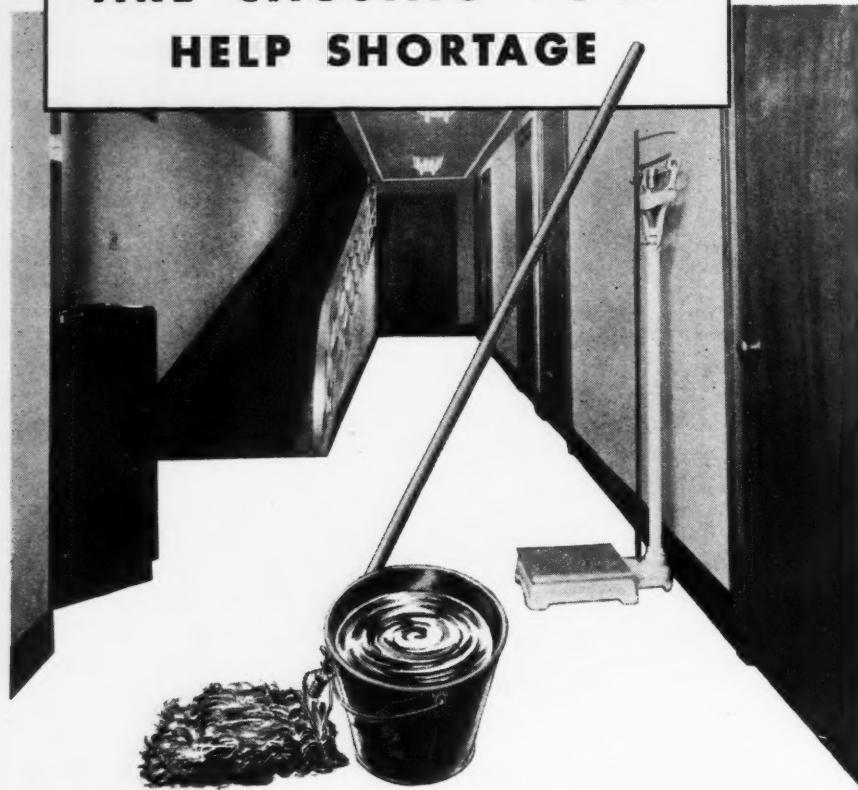


SO HOSPITALS WITH HOFFMAN MACHINES CAN KEEP 'EM RUNNING!

We keep our skilled technicians on the go these days—visiting here and visiting there—to give timely wartime help to hospitals equipped with Hoffman laundry machinery. They are continually making the rounds of Hoffman users in the hospital field—inspecting and checking the operation of Hoffman equipment, offering their experience in the solution of all laundry problems. In these days when equipment must be made to last, we're glad to place our trained field men squarely behind every Hoffman-equipped hospital laundry.

U. S. HOFFMAN MACHINERY
CORPORATION
107 Fourth Ave., New York 3, N.Y.
COMPLETE LAUNDRY EQUIPMENT SERVICE FOR THE INSTITUTION

MAYBE YOUR FLOORS ARE CAUSING YOUR HELP SHORTAGE



YOU can't blame floor maintenance crews for grumbling—or even quitting—over the extra work required by worn-out floors. And you can't expect inexperienced help to make shabby floors look hospital-clean either.

Clip Hours Off Cleaning Time

Plenty of hospitals, new and old, have gone a long way toward solving their help shortage problem by installing modern, easy-to-clean Armstrong Floors. Even a small or inexperienced crew can maintain these floors easily. And probably clip hours off cleaning time! For Armstrong's Linoleum requires no expert attention. Just a daily sweeping, an occasional washing and waxing will keep it spotless and shining for years.

Under the most heavy hospital traffic, an Armstrong Floor stands up. And your busy staff will bless the resilient, cushioning comfort of Armstrong's Linoleum every time they take a step.

You Can Get It Right Now

You don't have to wait to buy Armstrong's Linoleum or Linoflor. It's available right now. A phone call to your nearest linoleum merchant will bring you samples, facts, and figures. And there's a lot of helpful information in our new free book, "Better Floors." It shows you how efficiently Armstrong's Linoleum can serve you—how Armstrong Floors are serving others. Write the Armstrong Cork Company, Floor Division, 5708 State Street, Lancaster, Pa.



ARMSTRONG'S LINOLEUM LINOFLOR AND LINOWALL

Custom-Laid or  Standard Designs

ENGINEERS' QUESTION BOX

Preventing Oxygen Explosions

Question 11. Under what circumstances can explosions result from the use of oxygen? When can fires occur?—A.H., Ill.

ANSWER: Explosions resulting from the use of oxygen are really rapid chemical combinations of some combustible matter with oxygen. When iron or steel combines slowly with oxygen in the air we call it "rusting." When carbon in coal, wood or oil combines with oxygen from air, it is the faster process called "burning." When the combination is nearly instantaneous, the result is an "explosion." Many elements and compounds have an affinity for oxygen although the combinations take place with varying degrees of violence.

The Crosby-Fiske Forster "Hand Book of Fire Protection" shows that the following percentages of gases, in oxygen, will be explosive (beyond these limits a slow combustion may take place):

Ether	1.7 % to 39.5%
Ethylene	3.1 % to 79.9%
Cyclopropane	2.45% to 63.1%
Propylene	to 52.8%

When used in an oxygen tent the fire danger is great. Care should be taken to eliminate any sources of ignition. Smoking should not be permitted

RIESBECK AGAIN WINNER

The Question Box award of \$5 was presented to E. W. Riesbeck, Chicago consulting and construction engineer, for his answer to the question on the effect of the war on gas for heating.

in or near the enclosure nor should electrical heating devices be used.

Prevent explosions or fires in two ways. First, avoid explosive mixtures, if possible; second, remove all possibility of ignition.

The second precaution involves the prevention of accumulation of static electricity by use of grounded floors and apparatus; by maintenance of high humidity when control is possible; by avoidance of open flame apparatus; by use of the safety type of electrical switches, and by permitting neither silk nor satin clothing to be worn in dangerous areas.

In the presence of excess oxygen many substances have a low ignition temperature. Extraordinary precautions should always be taken when oxygen is free to escape either from an oxygen tent or from a patient's lungs. Ignition in either case can cause a fatal explosion.—H. F. VOGEL, E.E., Sunmount, N. Y.



PROCESSING OF HYGROSCOPIC MATERIALS

Simplified by Control of Humidity

Carrier has had wide experience in helping to solve problems of air and moisture control for drug and pharmaceutical manufacturers.

Since 1928, the Upjohn Company of Kalamazoo, Michigan, one of the country's largest makers of pharmaceutical supplies, has been able to process hygroscopic materials year 'round thanks to correct relative humidity maintained with Carrier equipment. Several installations have been made by Carrier in

the Upjohn plant in rooms where various types of compressed tablets, effervescent salts, capsules and pills—all highly hygroscopic—are made and packaged.

Higher and more uniform quality, reduction of loss from deterioration, and faster production have resulted from the improved conditions of temperature and humidity achieved in the Upjohn plant by Carrier engineers.

Carrier has long been a pioneer,

too, in the air conditioning of hospitals. Whether your requirements call for equipment for the control of temperature and humidity for a patient's room, a ward, an operating room, X-Ray room, or a complete air conditioning system for the entire building—your hospital is invited to benefit by Carrier's long and specialized experience in this field.

CARRIER CORPORATION, SYRACUSE, N. Y.

Carrier 
AIR CONDITIONING • REFRIGERATION

Do Heat Reclaimers Save Money?

Question 31: Can we save money by using heat reclaimers in the discharge from the washers in the laundry?—F.B., Ill.

ANSWER: Yes, provided more than four large washers are operated. If four or less are used, it is not advisable to spend the large sums of money necessary to buy reclaimers, unless exhaust steam is available in sufficient quantity to raise the water temperature in the tank to 180 or 190° F. It must be remembered that one heat reclaimer tank is insufficient to absorb all the heat from the laundry washers and exhaust steam from pumps and engine.—E. W. RIESBECK, Chicago.

HOUSEKEEPING PROCEDURES

Conducted by Alta M. Labell

Save Manpower by Saving Lives

"Keep workers from getting hurt" is the slogan of a series of articles recently released by the U. S. Department of Labor. Here is a list of "do's and don'ts" in regard to working on ladders and scaffolds (at best a hazardous procedure) compiled by Secretary of Labor Perkins' committee to conserve manpower and

published by the Office of War Information:

Ladders and Scaffolds

1. Use care in placing a ladder; the foot should be one fourth of the ladder length away from the wall against which the ladder is leaning.
2. Do not leave tools on top of a stepladder or on any other elevated place



THIRD OF A SERIES OF FACTS ABOUT

REFINITE Zeolite

Double the capacity of your greensand water softening equipment. Replace the mineral you are now using with Refinite High-Capacity Zeolite, the "permanent" zeolite with a durability record of more than 25 years. Refinite Zeolite kernels are controlled in size and shape, giving Refinite several unique operating advantages . . .

ONLY 10% BED EXPANSION

Your present tank equipment will hold over 20% more mineral when using Refinite Zeolite. Only 10% bed expansion is required for backwashing Refinite, compared to 33-1/3% with greensand or synthetic zeolites. This means more capacity . . . longer periods of service between regenerations . . . or smaller tanks. Other advantages include:

1. Foreign sediment washes out quickly, uses less backwash water.
2. Much less "free board" is needed, allowing more complete filling of tank.
3. Zeolite does not wash away, even at far more than the normal backwash flow rate.
4. Minimum of back pressure.
5. Refinite is not subject to packing or channeling.

Refinite Natural High-Capacity Zeolite is immediately available for shipment. Write for prices—today!

THE REFINITE CORPORATION, 105 Refinite Bldg., Omaha, Nebr.

from which they may fall. Effective tool holders should be used.

3. Place ladders only against solid stationary backing.
4. Always face the ladder when ascending or descending. Use both hands going up or down a ladder.
5. Use only ladders in good repair. Never use a broken or weak ladder or a ladder with missing rungs.
6. No uprights, braces or supporting members of any scaffold should be removed, loosened or weakened while any of the scaffold planking or flooring is in place.

New Eastern Officers

Three hospital housekeepers succeeded to the offices of governor, vice governor and secretary-treasurer of the Eastern District of the N.E.H.A. at the meeting held in Hartford, Conn., in May.

The new officers are: governor, Mrs. Katherine Quinn, executive housekeeper, Norwich State Hospital, Norwich, Conn.; vice governor, Emma Bahner, executive housekeeper, Jefferson Hospital, Philadelphia, and secretary-treasurer, Alice Bell, executive housekeeper, Waterbury Hospital, Waterbury, Pa.

for dry skins ...



UNUSUAL BLANDNESS and finest quality U.S.P. lanolin recommend Williams Lanolin Soap to your attention in cases of dry skin.

Uncombined alkali is virtually non-existent in Williams Lanolin Soap. Only the best grade oils are used in the making—and used in a way that precludes rancidity. It contains no dyes, no strong perfumes, no fatty acids.

Williams Lanolin Soap is long-lasting and economical, thanks to the extremely high pressure to which it is subjected. Its creamy, abundant lather rinses completely. Delicately perfumed and wrapped in good taste, there is nothing "medicinal" about this soap. Its appeal to

patients is that of a fine complexion soap.

Observe the qualities of Williams Lanolin Soap at first-hand. We will be pleased to send you a full-size cake with our compliments. Just mail the coupon.

The J. B. Williams Co., Dept. SB-09
Glastonbury, Conn.

Please send me a full-size cake of Williams Lanolin Soap.

Name _____

Address _____

City _____ State _____

This offer is limited to the medical and nursing professions. Please attach letterhead, card or other professional identification. Good only in U. S. A.

Bristleless Paint Brush

Paint brush bristles are getting scarcer and more expensive so a new bristleless type of roller coating device should be of special interest to housekeepers and maintenance men.

Reported in a recent issue of *Paint Progress*, house organ of a well-known paint manufacturer, is a paint roller, made entirely of noncritical materials, that has been developed for application of resin-oil emulsion paints.

Amateurs can use the roller as handily as can any professional, it is reported, and professional painters use it to conserve brushes for use with oil paints.

In working with the roller-coater, the paint should be placed in a flat-bottomed pan, one end of which is propped up so that the paint stays in the lower end. The roller is then dipped into the shallow edge of the paint and rolled toward the upper end of the pan until its fabric surface is completely covered. The final step is to roll the paint right onto the surface, leaving a fine textured surface. After use, the roller can be washed clean in plain water.

Brushes and Brooms

These lowly but important weapons in the housekeeper's armamentarium

must be conserved these days, too, for the fibers are becoming increasingly difficult to obtain.

Orpha Daly, housekeeper at MacNeal Memorial Hospital, Berwyn, Ill., offers the following suggestions:

"Brushes and brooms should be alternated from side to side when they are in use to keep them from wearing unevenly. After every sweeping job they should be cleaned thoroughly and hung up with the brush end down. Washing in mild soap and warm water and drying with the brush hanging down will often restore an otherwise useless broom or brush."

"A simple way to solve the problem of getting employees to take proper care of mops, brushes and brooms is to put a screw eye in the end of the handle and a large wall hook in the service room and see to it that the screw and the hook get together when the equipment is not in use."

Educating Future Housekeepers

The problem of the basic education that will be needed by the executive housekeeper of the future is uppermost in the minds of many leaders in the profession today.

In the opinion of Mrs. Winona Ballantyne of the University of Iowa Hospitals, Iowa City, "Any studies that would encourage broad vision and foresight, logical thinking, intelligent expression and the art of leading human beings would be assets to an executive housekeeper."

Academic courses, Mrs. Ballantyne believes, should include English, mathematics, elementary chemistry and physics, office organization and management, textiles and interior decorating. Successful completion of these courses, with a year's internship or practical experience in an accredited institution, should qualify a woman who has a talent for institutional management" for the important job of housekeeping director.

Another outstanding housekeeper who is an earnest believer in the need for academic training combined with practical experience is Mrs. Alta M. LaBelle, housekeeping director at Michael Reese Hospital, Chicago.

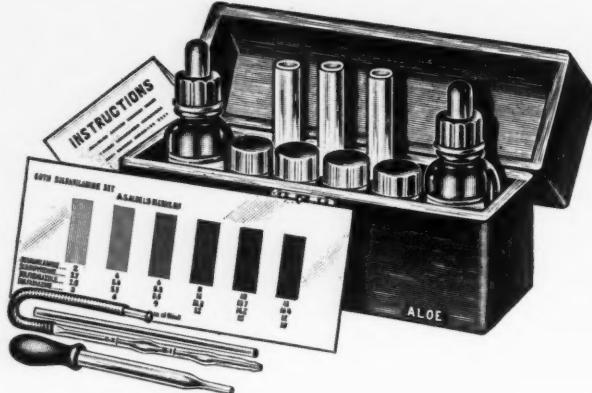
"I am looking forward to the time," Mrs. LaBelle stated recently, "when housekeeping will not be the hodgepodge that it has been in the past. Housekeepers must become more and more schooled in the art of classroom teaching. It may not be feasible for each hospital to maintain a housekeeping teaching staff, but perhaps there could be a central training school for all hospitals in a particular area."

Mrs. LaBelle is also insistent on the need for housekeeping internships, which she considers just as important to the improvement of hospital service as the training of student nurses and dietitians.

NEW! Rapid Sulfonamides Test Kit

for Determining Free Sulfonamides in Blood, Spinal Fluid and Urine

- No Filtrations Required
- Only 0.2 ml Specimen Required
- Compact Size — Easily Portable
- Tablet Form Reagents



Reference

A. Goth, "A Simple Clinical Method for Determining Sulfonamides in Blood," *Journal of Laboratory and Clinical Medicine*, Vol. 27, No. 6, March 1942.

Only 7 to 8 Minutes Average Time for a Single Test

The Goth Test Kit includes all necessary reagents and apparatus for the simple and rapid clinical determination of free sulfonamides at the bedside or in the laboratory, including sulfanilamide, sulfapyridine, sulfathiazole, and sulfadiazine. The Goth method has the unique advantage of using tablets containing the correct amounts of reagents mixed with special, selected binders that do not cause cloudiness or turbidity in the diluted specimen. The use of acetone as a protein precipitant eliminates the necessity of filtration. The method is sufficiently accurate

for clinical determinations. The accuracy of the test is limited only by the visual method of color comparison. If greater accuracy is required and laboratory facilities are available, the reading of the color can be done with a photoelectric colorimeter using an appropriate calibration curve.

L3-780—Goth Sulfonamides Test Kit, size 8½ by 2½ by 4½ inches, complete with sufficient tablet form reagents (except distilled water and acetone) for 100 tests, color chart and directions, each \$12.50

Clinical Laboratory Division



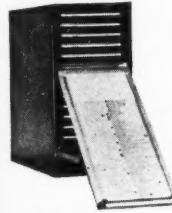
A. S. ALOE COMPANY

1831 Olive Street, Saint Louis, Missouri



"NERVE CENTER"

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YOUR ADMITTING OFFICE . . .
that's where vital case histories, clinical and administrative records are born. With today's acute shortages of clerical help, you'd naturally welcome a system of records that not only minimizes errors but eases the burden of work for all . . . from your office personnel on up to the executive offices.

Kardex Manifold-Copy Admission System actually does **seven** jobs in **one** typing operation! Re-

cord Library, Accounting Department, Nurse's Station, Credit Files, Admission Records and Laboratory...all are promptly advised of all essential information *as the patient is admitted*.

There are many other Kardex systems of filing, indexing and record-keeping that will lend wartime efficiency to your hospital routine . . . but we think you'll be *particularly* interested in the Kardex Manifold-Copy Admission System. The coupon below brings you full information with absolutely no obligation on your part.

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Please send full information about **KARDEX** Manifold-Copy Admission System.

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City _____ State _____

When the Hospital

Operates Its Own Dairy

MARGARET E. KENNEDY

Superintendent, Sanitarium of Paris, Paris, Tex.

WORLD WAR II has made most of us more appreciative of foods and more conscious of them not only from the standpoint of food value but also from those of money and points.

Now that the administrative head of the hospital may sign the request for supplementary rations for hospitals, the dietitian can catch up on some of the time she lost trying to find the nonexistent "physician in charge." If her hospital owns and operates a dairy for hospital use, she thanks her lucky star that point budgeting for milk products is not one of her major worries.

Milk has a double claim to the attention and study of the hospital administrator, the superintendent of nurses, the dietitian and the student nurses because it is more valuable than any other single food and it is the source of more diseases than all other foods, water included.

From Cow to Consumer

The study of the production of wholesome milk begins with a survey of the background of the dairy and continues to the time of consumption of the milk. It includes an understanding of public health standards for cleanliness of the dairy barns, the herd, the workers and the milkers. It also covers the accepted bacterial standards, which are gradually being raised, thus ensuring a better quality of milk without too great injustice to the smaller milk producers.

The aim of the hospital dairy operator should be to produce grade "A" milk which, according to the Commission on Milk Standards for raw

milk, necessitates maintaining the following standards:

1. Cows free from disease, tuberculin tested and examined by a veterinarian.
2. Workers (with milk and cows) free from disease determined by medical examination.
3. Sanitary conditions good.
4. Bacterial count not above 10,000 per cubic centimeter at the time of delivery.

Certain localities insist that all milk must be pasteurized or else comply with standards set for certified milk in order to ensure the safety of the milk supply for human consumption.

Healthy cows pay good dividends. When buying milch cows, the buyer should insist upon the receipt of certificates showing recent negative disease tests. Many pathogenic bacteria may be inert in milk and their presence may be unsuspected, but when they find their way into the human body they often cause digestive disturbances, tuberculosis, typhoid or undulant fever.

Dairy operators should be most observant of sanitary standards demanded by common decency and the usual standards of cleanliness. Their ideal should be "clean milk, not cleaned milk." High bacterial counts are often traced to their initial sources: dust, dirt and loose hair on the udder and flanks of the cows or unhealthy and unclean milk handlers. For a safe milk supply, cows must be healthy and clean.

Here follow a few "musts" copied from "C-142," a bulletin distributed by the Agricultural and Mechanical College of Texas:

"For a safe milk supply see that . . ."

"Cows are healthy and clean.

"Feeds that produce off-flavors are kept away from cows, and barns and milking sheds are clean and well ventilated.

"Milk handlers are healthy and clean and work with clean dry hands.

"Milking utensils are seamless, small topped or hooded, and milk strainers are of the rapid-flow sanitary type with single service cotton strainer pads.

"Milk storage containers are glass milk bottles, earthenware jars or properly tinned milk pails.

"Milk utensils are cleaned and sterilized by rinsing them in cold or lukewarm water; washing them thoroughly with a stiff brush in hot water to which an alkaline washing powder has been added; rinsing them again in clean hot or cold water; sterilizing them in hot water (170° F.) for at least two minutes, or in chlorine solution.

"Milk itself is cooled immediately and stored in clean, covered containers in a clean cold place away from strong-flavored foods."

Concrete Floors for Cleanliness

The cleaning of barns will be greatly facilitated by the use of concrete floors that slope properly for drainage purposes.

Milking machines are variously regarded. They are time-savers and, when kept clean, assure a low-count milk.

Milk can be cooled immediately by placing the containers of milk in cold water, ice water or in a refrigerator. Warm fresh milk should not be mixed with cold milk as this will hasten bacteria growth. If milk is clean, cold and covered it will keep. It should be stored in a temperature of between 40° F. and 50° F.

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Vol. 6

Bottling should be done at the dairy, but if this is not possible, it should be transported to the bottling station at a temperature below 50° F. For hospital use, filling the bottle by pouring milk directly into it is tedious, tiresome, wasteful and often insanitary. The rotary filler and capper is a very satisfactory machine. Both operations, filling and capping, are done with one stroke of the operating lever and there is no handling of the filled bottles between the bottling and capping operations.

Half-pint bottles are most economical for hospital tray service because all unopened bottles can be returned to the general kitchen where the milk can be used for cooking purposes. Patients rarely refuse milk served from the capped bottles but often decline it when served in open glasses.

The reduction in the waste of milk increases the production of milk products, such as cream, butter, and cheese—valuable foods for varied menus.

The victory garden has long held the headlines, and it has been admitted that milk production has been increased approximately 36 per cent. But when the zeal of the victory gardener has been diverted from its war-time channels to the less glamorous peace-time needs, it will be a comforting thought to the herd owner that his peace-loving herd will contentedly graze on from war to peace-time usefulness, steadily sustaining the nations that must rebuild the world.

ALMONDS—A Case History

ILMA M. LUCAS

Dietitian
California Foods Research Institute
San Francisco

IN war time accent is on energy foods. There is so much to do and frequently not enough energy to do it. Which are the foods that furnish energy in a palatable form?

Almonds contain more than 52 per cent fat, which is converted into food energy. Present in this fat is more than 18 per cent of the unsaturated linolenic acid, as important to fats as essential amino acids are to proteins. As the body cannot synthesize

this fatty acid, it must be obtained from food and, fortunately, almonds contain no small measure of it.

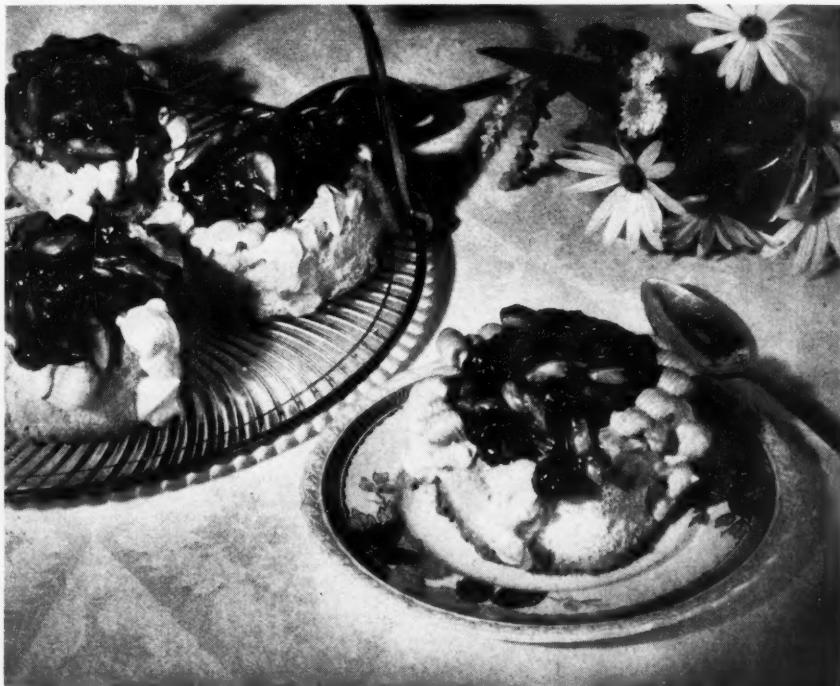
In addition to furnishing valuable food energy, it is well to remember that fat is a vitamin carrier; it spares the greedy use of vitamin B₁ and it influences positively the proper use of calcium. As fats become scarce, remember almonds.

We hear much about the need and value of proteins these days yet meat, which is primarily a food protein, is scarce and becoming scarcer. Where can we look for alternates?

Almonds come to the rescue with more than 21 per cent protein, which contains 8 out of 10 of the essential amino acids—lysine, tryptophane, leucine, isoleucine, phenylalanine, valine, arginine and histidine. This is valuable protein which provides anticipated body growth, maintenance and repair. Even though the protein is not as efficient as that of milk, its biological value has no opportunity to be reduced since almonds do not have to be cooked as do many protein foods. They are edible "as is."

With food authorities concerned over recent unfavorable findings in the calcium and iron intake of American dietaries, nutrition-wise people are seeking good sources of these valuable salts. Almonds have an astonishing wealth not only of these minerals, but of others, too, assuming a rightful place among calcium-rich foods, such as molasses and dried figs. They contain 5½ times as much calcium as carrots, 19 times as much calcium as lean beef, 3½ times as much as celery and 2 times as much as milk.

They contain, too, 50 per cent more iron than foods ordinarily associated with this mineral, such as raisins, prunes, lean beef and spinach.



Almond date caramel cups give unusually good eating qualities to sponge cake cut into rounds and topped with caramel custard, which has been made pleasantly "chewy" by the addition of almonds and dates.

Phosphorus, although not as vital as iron and calcium, is definitely an essential mineral. We find it present in almonds to a greater extent than in any other domestic nuts. Also, these nuts contain $5\frac{1}{2}$ times more phosphorus than does milk, $2\frac{1}{2}$ times as much as lean beef and 27 times as much as oranges. Sodium, potassium, magnesium and calcium are also present in such proportion as to render the nut outstandingly alkaline.

Variety of food is recommended and so is variety of vitamins. Following are some of the necessary substances found in almonds.

Carotene pro-

vitamin A)	1.3 I.U. per gm.
	37.0 I.U. per oz.
Vitamin B ₁	.0020 mg. per gm.
	.056 mg. per oz.
Vitamin G	.0033 mg. per gm.
	.093 mg. per oz.
Vitamin E	2.0 mg. per gm.
	56.7 mg. per oz.
Pyridoxin	.02 mg. per gm.
	.567 mg. per oz.
Niacin	.07 mg. per gm.
	1.98 mg. per oz.
Biotin	.00018 mg. per gm.
	.0051 mg. per oz.
Choline	.8 mg. per gm.
	22.68 mg. per oz.

There are also traces of vitamin D and pantothenic acid in these nuts,

Why Canned Foods Spoil

MOULDS and other micro-organisms cause much of the spoilage of foods. The spoilage of canned products due to fermentation is caused by under-processing. Flat sour develops best at lukewarm temperatures. Thorough processing and speed in working to avoid long standing in lukewarm temperature are the preventives.

If the slogan "Two hours from garden to can" is practiced, loss is negligible. Use only fresh products. If products must be held over, place them in the refrigerator at 40° F. The botulinus organisms are found

in soil and, since the spores are highly resistant to heat, canners in homes should take such precautions as washing the vegetables thoroughly, cooking them promptly while still fresh and keeping the canned goods in cool places so that any possible surviving spores will not be encouraged to grow.

All canned food should be stored in cool, dark, dry places. Spoilage is always greater where storage temperature is 80° F. or higher. Light fades food canned in glass.—MYRTIS B. STOLZ, dietitian, Sanitarium of Paris, Paris, Tex.

which seem to climax their affinity for vitamins. They constitute an excellent source of vitamin E, comparing favorably with wheat germ oil, which is notably high in this vitamin, and the quantity of niacin compares favorably with such accepted sources as muscle meats of beef and pork and also with whole wheat.

Pyridoxin is even higher in almonds than in rice polishings, wheat

germ and liver. Biotin and choline, two of the lesser known members of the B family, make worthy contributions also. The biotin in almonds compares favorably with that found in cereals, legumes, meats and dairy products, the choline, with soybeans, meats and cereals.

And, in addition, almonds are good to eat. Small wonder that the story of California grown almonds is convincing!



Almond novelty pudding served with custard sauce tempts tired appetites. Toasted bread is the base.



For hospital staff suppers cheese filled figs decorated with blanched almonds lend zest to the meal.

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how Savory toast gets that way

Non-technical, and really very interesting, we think . . .

question: "Why is Savory-made toast different and better than toast made in other ways?"

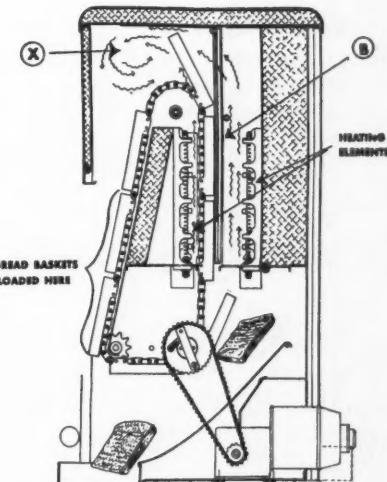
answer: "It's all because of the heat chamber at the top of each Savory Toaster. That PRE-COOKS the bread!"

question: "Is that good?"

answer: "Yes . . . you see the bread goes up the escalator to be thoroughly processed for toasting. Now see where 'X' marks the spot? That's it . . . the hot, moist dome-like pre-toasting oven where the moist heat currents caramelize the sugar content and transform insoluble starches to easily digestible dextrins. Then, coming down through the toasting chamber (B), both sides of the bread are quickly crisped to a delicious golden-brown by the double heating elements. *The center stays soft, fresh and tender.*"

question: "And that's an exclusive feature?"

answer: "Absolutely . . . no other toaster uses this process to assure a perfect *inside* to each piece of toast, as well as an appetizingly browned and tasty *outside* surface. So when you say 'Savory Toast' . . . you *really* mean it's Savory in every way!"



Model CT-4, all-electric,
540 to 720 slices per
hour.

Savory has a complete line of electric and gas toasters. The dome-like, pre-heating oven which gives the toast its "soft-heartedness" and its crisp, crunchy browned surface is a feature of both electric and gas Savorys.

Write for FREE index cards giving new and unusual toast recipes for use in extending rationed foods.

You may now be eligible to purchase one of these efficient units under L-182. Consult your dealer or ask us for details.

Savory

EQUIPMENT

a division of TALON, INC.

122 PACIFIC STREET, NEWARK, NEW JERSEY



Model PQ . . . gas operated,
540 to 720 slices per
hour.

The Red Cross to the Rescue

ITS nurses' dining room with waitress service, white tablecloths and colorful draperies was regarded with pride by Shadyside Hospital, Pittsburgh. As the pinch of reduced personnel became increasingly great, however, it was decided that something must be done.

The first step was to eliminate the table linens and to wax the table tops. Unfortunately, the serving room was too narrow to permit cafeteria service so, as an alternative, serving tables were set up for buffet service. These were equipped with two single hot plates to provide hot coffee and tea.

Even this arrangement did not answer the problem completely, according to Irene L. Willson, director of the dietary department. Too much time was spent in running from steam table to service counter.

"Fortunately," Miss Willson says, "the chairman of the Red Cross Canteen Corps came to our assistance. Two of the corps members are of great help to us in this respect at lunch and dinner. One also takes the tickets.

"On tray stands about the dining room we have placed aluminum trays on which each person is asked to place her soiled dishes. This helps in clearing off the tables and in making them more presentable for the next guests.

"We were fortunate in being able to get enough composition trays without which this type of service would be impossible."

Miss Willson adds, "With increasing shortages, we may have to take more drastic steps. What they will be, only time will tell."

FOOD FOR THOUGHT

Facts About Peanuts

Complete information regarding the nutritive value of peanuts is included in the booklet "Peanuts, Their Food Value and Interesting Recipes," which is being distributed by the National Peanut Council, 812 Citizens and Southern National Bank Building, Atlanta, Ga. The booklet is for the trained food and nutrition worker and for others who wish authoritative information on peanuts and peanut products.

In addition to tables showing the contents and approximate composition of raw shelled peanuts and descriptions of peanut flour and peanut oil, numerous recipes are included for the use of these products in soups, entrees, main dishes, salads, breads and desserts.

Lesson on Breakage

Here is a lesson on dish breakage from the book of experience as written by a large New York hotel, the Waldorf-Astoria. In the course of a thorough study on breakage, it was proved that most accidents are caused by a few mistakes made repeatedly.

Accordingly the management devised posters depicting the right way to perform various operations, such as dish and glass washing. In consequence, the new man or woman on the job—and who isn't new these days?—is taught through visual aids to separate china into low stacks before carrying or cleaning; also to stack carefully in the sink all of one kind of china together to prevent tumbling and chipping, and finally to rest the large pieces securely and hold them firmly while scrubbing.

Tips on Canning

Two folders on war-time canning, one dealing with fruits and vegetables and the other with meats and poultry, are being prepared by the U. S. Department of Agriculture for the canning season.

Information on community canning is fully discussed in Miscellaneous Publication No. 472, "Community Food Preservation Centers." All are publications of the Bureau of Human Nutrition and Home Economics, U. S. Department of Agriculture.

Press releases covering the glass jar and pressure cooker situation will soon be available. For further information address T. Swann Harding, Office of Information, Administration Building, U. S. Department of Agriculture, Washington, D. C.

New Rulings From the O.P.A.

NO HOSPITAL patient will suffer from inability to obtain the food required for his health, regardless of whether he is on a special diet.

The Office of Price Administration on July 5 emphasized this point in instructions sent to local war price and rationing boards and to other O.P.A. field offices.

The problems of the hospitals have been studied by O.P.A. and medical authorities with a view to developing a uniform procedure covering the granting of supplemental allotments for hospitals and it appears that a solution is near.

Until this procedure has been worked out, however, Section 11.6 of G.R.O. 5 should enable hospitals to obtain the necessary supplemental allotments so that no patients shall suffer from dietary deficiency. This provision gives local boards authority to grant such allotments to meet the dietary requirements of patients living in, and receiving care in, hospitals, whether or not such patients are on special diets.

Such questions as the availability of fresh fruits and vegetables and unrationed substitutes, such as pou-

try and fresh fish, and the physical facilities of hospitals to process and store such foods will be taken into consideration by the local boards in determining the amount of supplemental allotments granted.

Two more rulings from the O.P.A. that are of interest to hospitals cover evaporated and condensed milk and rationed fats and oils.

Evaporated and condensed milk has been added to the group of rationed foods for which red ration stamps are needed. One point is required for one 14½ oz. or for two 6 or 8 oz. cans.

A supplemental allotment to acquire canned evaporated and condensed milk needed by a hospital to meet the dietary needs of its patients may be obtained on applications by it to its local War Price and Rationing Board under Section 11.6 of G.R.O. 5.

Amendment 25 to Ration Order 16 now permits the use of rationed fats and oils for external therapeutic purposes, such as bathing newborn infants and external application in skin diseases. Hospital applications on Form 1605 will be handled by the district offices.



FRY COOKS CAN SAVE OIL and Improve Results with this New Instruction Chart

WAR CUTS COOKING OIL SUPPLY
EASY RULES FOR SAVING FRYING OILS
... AND IMPROVING RESULTS

• SAVING BEGINS AT YOUR THERMOSTAT DIAL

The thermostat's job is to control the heat of frying oil so that properly fried food may be served and waste of oil prevented. The dial is divided into degrees from 300° to 400° so that you can select the correct temperature for each food. Find the dial that looks like yours and put it to work.

FAT TEMPERATURES

It's most for fat to hold its natural quality and taste when it is heated to a temperature which is about 10° below the point at which it begins to smoke.

It is most for food to be fried at the smoking point. Recommended for well-cooked food and home cooking.

FOOD PREPARATION AIDS

• Before frying: Use the heat that heat insulation provides. If there is heat insulation, use it.

• For uniformly: Use pieces of similar size or the same size.

• In general: Small pieces should be fried at higher temperatures than large pieces.

• Oil temperature after frying:

WHAT MEANS AND WHY?

Oil Coagulates Best: Before 300°. For 300° to 350°, the oil is at its natural temperature. Between 350° and 400°, the oil is at its natural temperature. Between 400° and 450°, the oil is at its natural temperature. Between 450° and 500°, the oil is at its natural temperature. Between 500° and 550°, the oil is at its natural temperature. Between 550° and 600°, the oil is at its natural temperature. Between 600° and 650°, the oil is at its natural temperature. Between 650° and 700°, the oil is at its natural temperature. Between 700° and 750°, the oil is at its natural temperature. Between 750° and 800°, the oil is at its natural temperature. Between 800° and 850°, the oil is at its natural temperature. Between 850° and 900°, the oil is at its natural temperature. Between 900° and 950°, the oil is at its natural temperature. Between 950° and 1000°, the oil is at its natural temperature. Between 1000° and 1050°, the oil is at its natural temperature. Between 1050° and 1100°, the oil is at its natural temperature. Between 1100° and 1150°, the oil is at its natural temperature. Between 1150° and 1200°, the oil is at its natural temperature. Between 1200° and 1250°, the oil is at its natural temperature. Between 1250° and 1300°, the oil is at its natural temperature. Between 1300° and 1350°, the oil is at its natural temperature. Between 1350° and 1400°, the oil is at its natural temperature. Between 1400° and 1450°, the oil is at its natural temperature. Between 1450° and 1500°, the oil is at its natural temperature. Between 1500° and 1550°, the oil is at its natural temperature. Between 1550° and 1600°, the oil is at its natural temperature. Between 1600° and 1650°, the oil is at its natural temperature. Between 1650° and 1700°, the oil is at its natural temperature. Between 1700° and 1750°, the oil is at its natural temperature. Between 1750° and 1800°, the oil is at its natural temperature. Between 1800° and 1850°, the oil is at its natural temperature. Between 1850° and 1900°, the oil is at its natural temperature. Between 1900° and 1950°, the oil is at its natural temperature. Between 1950° and 2000°, the oil is at its natural temperature. Between 2000° and 2050°, the oil is at its natural temperature. Between 2050° and 2100°, the oil is at its natural temperature. Between 2100° and 2150°, the oil is at its natural temperature. Between 2150° and 2200°, the oil is at its natural temperature. Between 2200° and 2250°, the oil is at its natural temperature. Between 2250° and 2300°, the oil is at its natural temperature. Between 2300° and 2350°, the oil is at its natural temperature. Between 2350° and 2400°, the oil is at its natural temperature. Between 2400° and 2450°, the oil is at its natural temperature. Between 2450° and 2500°, the oil is at its natural temperature. Between 2500° and 2550°, the oil is at its natural temperature. Between 2550° and 2600°, the oil is at its natural temperature. Between 2600° and 2650°, the oil is at its natural temperature. Between 2650° and 2700°, the oil is at its natural temperature. Between 2700° and 2750°, the oil is at its natural temperature. Between 2750° and 2800°, the oil is at its natural temperature. Between 2800° and 2850°, the oil is at its natural temperature. Between 2850° and 2900°, the oil is at its natural temperature. Between 2900° and 2950°, the oil is at its natural temperature. Between 2950° and 3000°, the oil is at its natural temperature. Between 3000° and 3050°, the oil is at its natural temperature. Between 3050° and 3100°, the oil is at its natural temperature. Between 3100° and 3150°, the oil is at its natural temperature. Between 3150° and 3200°, the oil is at its natural temperature. Between 3200° and 3250°, the oil is at its natural temperature. Between 3250° and 3300°, the oil is at its natural temperature. Between 3300° and 3350°, the oil is at its natural temperature. Between 3350° and 3400°, the oil is at its natural temperature. Between 3400° and 3450°, the oil is at its natural temperature. Between 3450° and 3500°, the oil is at its natural temperature. Between 3500° and 3550°, the oil is at its natural temperature. Between 3550° and 3600°, the oil is at its natural temperature. Between 3600° and 3650°, the oil is at its natural temperature. Between 3650° and 3700°, the oil is at its natural temperature. Between 3700° and 3750°, the oil is at its natural temperature. Between 3750° and 3800°, the oil is at its natural temperature. Between 3800° and 3850°, the oil is at its natural temperature. Between 3850° and 3900°, the oil is at its natural temperature. Between 3900° and 3950°, the oil is at its natural temperature. Between 3950° and 4000°, the oil is at its natural temperature.

KEEP YOUR FRYER CLEAN

Please don't neglect. Lamps should be cleaned daily. Be sure to use a cleaning solvent with a low flash point. For this will lower the deposit that causes smoke, burning of the fat and shortens its life. (Write the lamp manufacturer for complete cleaning instructions.)

COOK THE WAY YOU WANT IT
ROBERTSHAW THERMOSTAT COMPANY

**IT IS WISE TO HAVE YOUR CHECKS
MAILED BY A COMPTON SERVICE MAN**

A common and costly fault of inexperienced fry cooks is the over-heating of frying fats. This ruins scarce cooking oil, wastes money and results in inferior fried foods. But there's a simple solution right here if your fryers are equipped with Robertshaw thermostats.

The thermostats were made and installed to control the heat, thereby save oil and assure top quality foods. This new instruction chart will teach even inexperienced employees how to operate the fryer to achieve these badly needed results.

It is included in the set of five instruction charts which you can get for only twenty-five cents — just enough to cover printing and mailing costs. Besides the frying chart, the set includes charts for roasting and bake ovens, coffee urns and steam tables. Each chart is 10" x 15", printed in two colors on durable cardboard. Send for your set today, using the handy coupon below.

ROBERTSHAW THERMOSTAT CO.

30 Church St., New York 7, N. Y.

Please send me the set of five instruction charts to help me teach inexperienced employees how to save food and fuel. I enclose twenty-five cents to cover printing and mailing costs.

Name _____

Firm Name _____

Street _____ City and State _____

ROBERTSHAW

September Dinner Menus for the Small Hospital

Margaret Mines

Dietitian, Pocatello General Hospital, Pocatello, Ida.

Day	Soup	Meat, Fish or Substitute	Potatoes or Substitute	Vegetable	Relish	Dessert
1.	Split Pea Soup	Lamb Chops, Butter Gravy	Mashed Potatoes	Buttered Carrots	Mint Preserves	Hot Applesauce
2.	Celery Soup	Meat Loaf	Browned Potatoes	Harvard Beets	Wilted Lettuce	Fruit Gelatin
3.	Tomato Soup	Baked Salmon	Escalloped Potatoes	Buttered Turnips	Celery Hearts	Tapioea Pudding
4.	Split Pea Soup	Roast Veal, Dressing	Mashed Potatoes	Buttered Chard	Tomato Sections	Peach Tarts
5.	Vegetable Soup	Chicken Fricassee, Baking Powder Biscuits	Mashed Potatoes	Sweet Corn	Olives, Pickles	Strawberry Ice Cream
6.	Clear Tomato Soup	Ham Loaf	Parsley Potatoes	Peas	Horseradish Sauce	English Apple Pie
7.	Chicken Broth With Rice	Tomato Gelatin Ring With Tuna, Macaroni, Celery	Green Beans	Carrot Sticks, Radishes	Ginger Pear Preserves	Peach Ice Cream
8.	Vegetable Soup	Liver	Parsley Potatoes	Frosted Spinach	Coleslaw	Zwieback Pudding
9.	Cream of Carrot Soup	Pork Chops	Escalloped Potatoes	Green Beans	Celery Hearts	Butterscotch Pudding
10.	Celery Soup	Fish	Browned Potatoes	Peas	Tartare Sauce	Pumpkin Pie
11.	Vegetable Soup	Breaded Veal	Creamed Potatoes	Buttered Carrots	Wilted Lettuce	Vanilla Wafer Pudding
12.	Asparagus Soup	Steaks	Baked Potatoes	Squash	Sweet Pickle Relish	Baked Apple
13.	Barley Broth	Lamb Chops	Au Gratin Potatoes	Frosted Spinach	Mint Sauce	Apricot Upside-Down Cake
14.	Clear Broth	Cheese and Bean Loaf, Catsup White Sauce	Asparagus	Beets	Pickled Onions	Lemon Custard

(Continued on page 110)



A WHOLESMOME ADJUVANT

Iced or hot, coffee—carefully roasted and properly brewed—is frequently indicated for its tonic effect on the human machine. In best medical opinion, coffee is a nerve nutrient, a dietary adjuvant rendering specific assistance during convalescence. Continental Coffee's superb fragrance rouses attention to many an otherwise "uninteresting" but nourishing tray. In topping off the meal, Continental Coffee is delightfully satisfying, the product of an unusual blend of special coffees. Thermal-roasted for the utmost in finer coffee flavor and aroma—reason enough to specify Continental Coffee and to serve this pure, natural beverage in its most appetizing form!

If—today—you are not using Continental Coffee, send for a free sample to Continental Coffee Co., 375 W. Ontario St., Chicago, Ill.

CONTINENTAL COFFEE COMPANY
Chicago and Brooklyn

CONTINENTAL
The Magnet of every Menu!



COFFEE
AMERICA'S LEADING
RESTAURANT COFFEE

Short of Help?



Then you'll appreciate even more the popular Kellogg's Individuals! Quick . . . easy to serve. Exact portions . . . no waste. Good nutrition, too.

★ There just isn't an easier, better way for your help to serve cereal! Besides saving time, work and fuel, Kellogg's Individuals eliminate waste, permit exact cost control—and highly important—they're not rationed! Every Kellogg's Individual served helps you save on "shortage" foods.

There's the patients' side of it, too. Notice how they brighten up, appreciate it, when you offer them their choice of these 7 delicious, oven-fresh, crispy Kellogg's Cereals—each in its own individual, sanitary package. Good for them, too, because all Kellogg's Cereals supply whole grain nutritive values.

Make it *Kellogg's Individuals* next time you order! Your wholesaler always has a fresh supply. Packed in cases of 50 straight or 100 assorted.



7 VARIETIES TO CHOOSE FROM:

Kellogg's Corn Flakes • Rice Krispies
All-Bran • Pep • Kellogg's 40% Bran Flakes
Krumbles • Kellogg's Shredded Wheat

Save time . . . work . . . fuel with

KELLOGG'S CEREALS

MADE IN BATTLE CREEK

September Dinner Menus for the Small Hospital

Day	Soup	Meat, Fish or Substitute	Potatoes or Substitute	Vegetable	Relish	Dessert
15.	Cream of Carrot Soup	Liver	Parsley Potatoes	Sweet Corn	Catsup	Spanish Cream
16.	Split Pea Soup	Pot Roast, Gravy	Mashed Potatoes	Squash	Panfried Radishes	Ice Cream, Chocolate Sauce
17.	Vegetable Soup	Baked Fish, Egg Sauce	Boiled Potatoes	Buttered Beets	Olives	Fruit Gelatin
18.	Chicken Broth	Swiss Steak	Browned Potatoes	Glazed Carrots	Coleslaw	Fresh Fruit
19.	Jellied Consommé	Roast Beef, Yorkshire Pudding	Mashed Potatoes	Stewed Tomatoes	Sweet Pickles	Peppermint Ice Cream
20.	Clear Tomato Soup	Chicken à la King	Baked Potatoes	String Beans	Glazed Carrots	Broiled Grapefruit
21.	Chicken Broth	Vegetable Omelet	Potato Puffs	Baked Tomatoes	Watermelon Pickle	Apple Betty
22.	Toato Soup	Braised Beef Heart, Gravy	Mashed Potatoes	Turnip Greens	Celery	Sliced Peaches
23.	Chicken Broth	Ham	Glazed Sweet Rolls	Sweet Corn	Mustard Sauce	Strawberry Ice Cream
24.	Split Pea Soup	Fish, Tartare Sauce	Parsley Potatoes	Parsnips	Sweet Pickles	Lemon Pie
25.	Clear Tomato Soup	Lamb Shoulder Chops	Creamed Potatoes	Peas and Carrots	Dill Pickles	Gingerbread
26.	Vegetable Soup	Fried Chicken, Gravy	Mashed Potatoes	Harvard Beets	Sliced Tomatoes	Ice Cream
27.	Chicken Broth	Roast Veal, Dressing	Mashed Potatoes	Lima Beans	Spiced Peaches	Apple Pie
28.	Cream of Corn Soup	Vegetable Plate: Baked Stuffed Potato With Cheese, Beets, Broccoli, Squash				Baked Pears
29.	Tomato Soup	Roast Pork	Mashed Potatoes	Cauliflower	Sliced Tomatoes	Ice Cream
30.	Split Pea Soup	Meat Stew With Potatoes, Peas, Carrots, Onions			Wilted Lettuce	Apple Crisp With Fruit Sauce

All our soups are homemade: We seldom serve a salad with the dinner as our supper menu always includes one. We generally have a clear soup with the dinner and a cream soup with supper.

Recipes will be supplied on request by The MODERN HOSPITAL, Chicago.

On their War Record...

Sunfilled pure concentrated
ORANGE and GRAPEFRUIT JUICES
will simplify the economical
planning of post-war menus



CITRUS CONCENTRATES, INC.
DUNEDIN, FLORIDA

As previously announced, the total output of Sunfilled concentrated citrus fruit juices has been drafted for service of the armed forces. Not only have they provided a solution to the problems of perishability and cargo space required to transport bulky fresh fruits . . . they afford the equivalent in flavor, body, nutritive values and vitamin C content as well. This achievement of Sunfilled Products means a better balanced diet for our fighting forces and those of our allies receiving them as lease-lend supplies.

Sunfilled quality, economy and convenience count today! These dependable qualities will also serve to advantage in the planning of post-war menus. Until present restrictions are modified, available fresh fruits, though more costly and less convenient to prepare, should prove adequate for civilian needs.

Tempting Variety... GOOD NOURISHMENT

...these cold cuts are just what they want in warm weather meals



WARM WEATHER SPECIAL

Cool slices of Swift's Premium Leona, Liver Cheese and Cooked Specialty. Served with potato salad and garnish. Choice of beverage—rolls and butter. Dessert.

Summer menus, made delicious with Swift's Premium Table-Ready Meats, have all the advantages. Easy to prepare, economical—they're sure to please patients and staff alike!

Patients are extra fussy nowadays! They want good food that tempts hot-weather appetites; they want variety—and you are trying to be thrifty. What to do about it? Swift's Premium Table-Ready Meats are providing an answer for more and more institutions daily. Here's how!

These wholesome, appetizing ready-to-serve meats give any meal maximum eye and appetite appeal. Yet they hold your time and material costs down;

they cut out waste. So satisfying combinations can be easily, quickly prepared.

They provide menus of endless variety, too—for there are over 35 different kinds, all made super-delicious with selected ingredients, home kitchen care.

Of course, these days you can't always get every Swift's Premium variety you ask for. So substitute others. They're all Swift's Premium quality—all delicious!

SWIFT'S PREMIUM *Table-Ready* MEATS

Leona
Braunschweiger
Luncheon Meat
Cooked Tongue

Cooked Specialty
Lunar Loaf
Liver Cheese
Old-fashioned Meat Loaf

Pork Loin
Corned Beef
Savory Loaf

Sandwich Meat
Head Cheese
Souse

What Makes a GOOD Hospital Face Mask

INCREASED interest in air-borne infection has led to a further questioning as to the bacterial filtering efficiency of face masks.

The older concept of droplet infection, or Flügge's concept, has undergone some change in recent years. The droplets recognized by Flügge or "droplets proper," discharged from the upper respiratory tract during coughing, sneezing and talking, are removed from the air by gravity within a short distance from their source. Additional small droplets are also expelled from the upper respiratory tract during talking, coughing and sneezing.

These droplets rapidly lose their moisture, leaving suspended in the air minute particles called "droplet nuclei."¹ This second form of droplet is properly termed air borne in that these particles will remain suspended in the air for long periods of time and may be carried through the air for some distance. Droplets proper may change into droplet nuclei or become air borne when the larger droplets settle, evaporate and are lifted into the air with dust.

Droplets Become Droplet Nuclei

There is no question but that droplet nuclei may be expelled from the upper respiratory tract or that droplets proper by evaporation are changed in form to become droplet nuclei.

To what degree droplet nuclei are responsible for the transmission of respiratory diseases is questionable. However, the potential danger of these droplets, especially in the air of the operating room, makes this newer concept of droplet infection a

Presented before the Iowa Hospital Association, April 1943.

¹Wells, W. F.: On Air-Borne Infection; Droplets and Droplet Nuclei. *Am. J. Hyg.* **20**:611 (Nov.) 1934.

ROLAND ROOKS

Assistant Professor of Hygiene
and Preventive Medicine
State University of Iowa

factor deserving of consideration in mask construction.

The present interest in the bacterial counts of operating room air and attempts made to sterilize this air have also led to questioning as to the effectiveness of face masks. Secondary infections of "clean" surgical cases are not uncommon.^{2, 3, 4} Walker⁵ found that in a series of deaths resulting from hemolytic streptococcus infections following operations on patients who should have had "clean" wounds half of the nursing personnel were carriers of hemolytic streptococci.

Walker states: "Again, study of the masks revealed that they were woefully inefficient, as far as they could be considered germproof. In the absence of other positive evidence, it seemed fair to deduce that this epidemic of streptococcus infection was probably due to streptococci carriers inefficiently masked."

Hart and Schiebel⁶ in reviewing this subject conclude that "sufficient evidence has been brought forward to indicate that the bacteria in the noses and throats of the operating team and of the gallery have distinct

²Cairns, Hugh: Bacteria Infection During Intracranial Operations. *Lancet* **1**:1193 (May) 1939.

³Ives, Howard R., and Hirshfeld, John W.: The Bacterial Flora of Clean Surgical Wounds. *Ann. Surg.* **107**:607 (April) 1938.

⁴Overholt, Richard H., and Betts, Reeve H.: A Comparative Report on Infection of Thoracoplasty Wounds. *J. Thoracic Surg.* **9**:520 (June) 1940.

⁵Walker, I. J.: How Can We Determine the Efficiency of Surgical Masks? *Surg. Gynec. Obst.* **50**:266 (Jan.) 1930.

⁶Hart, D., and Schiebel, H. M.: Role of the Respiratory Tract in Contamination of Air: A Comparative Study. *Arch. Surg.* **38**:788 (April) 1939.

possibilities in regard to the infection of wounds."

The overcrowding that is certain to occur during war in our armed camps, in industry and in hospitals has also led to a reevaluation of masks in limiting the transmission of respiratory diseases. There is some difference of opinion as to whether adequate inmasking and proper use of the mask would be of value in controlling respiratory epidemics. Few carefully controlled studies of this kind have been reported.

Why Masks Failed to Protect

One such study⁷ was carried out by the California State Board of Health during the last influenza epidemic. It was stated that this study "did not show any influence of the mask on the spread of influenza in those cities where it was compulsorily applied." This apparent failure of the mask was caused, first, by the large number of improperly made masks; second, by faulty wearing of the masks, and, third, by wearing masks at improper times.

The first consideration in mask construction is that the material selected act as a bacterial filter. Various impermeable masks have been recommended.^{8, 9} Obviously, it is impossible to fit such a mask too closely to the face as one must breathe around the mask rather than through it. Experiments have shown that bacteria are deflected into the air around such a mask.

In addition to acting as a filter, the material selected cannot have so high a resistance to air flow as to

⁷Kellogg, W. H., and MacMillan, Grace: An Experimental Study of the Efficacy of Gauze Face Masks. *Am. J. Pub. Health* **10**:34 (Jan.) 1920.

⁸Tottenham, R. E.: A New Operating Mask. *Brit. Med. J.* **1**:756 (April) 1936.

⁹Mellinger, H. V.: New Mask That Protects Both Physician and Patient. *J.A.M.A.* **45**:662 (Aug.) 1930.

“Whose Service is Freedom”

This is America, whose sons and daughters go to the distant places of the earth . . . to serve.

This is America, whose Surgeons, Physicians and Pharmacists go with them, to fight death and pain and infection, or stand fast at home to safeguard the lives and health of those they love . . . again, to serve.

This is America, whose men of research carry on an unending quest for new weapons against disease and suffering. They, too, serve.

This is our America—a land where each man in his own way is free to serve his fellow men.

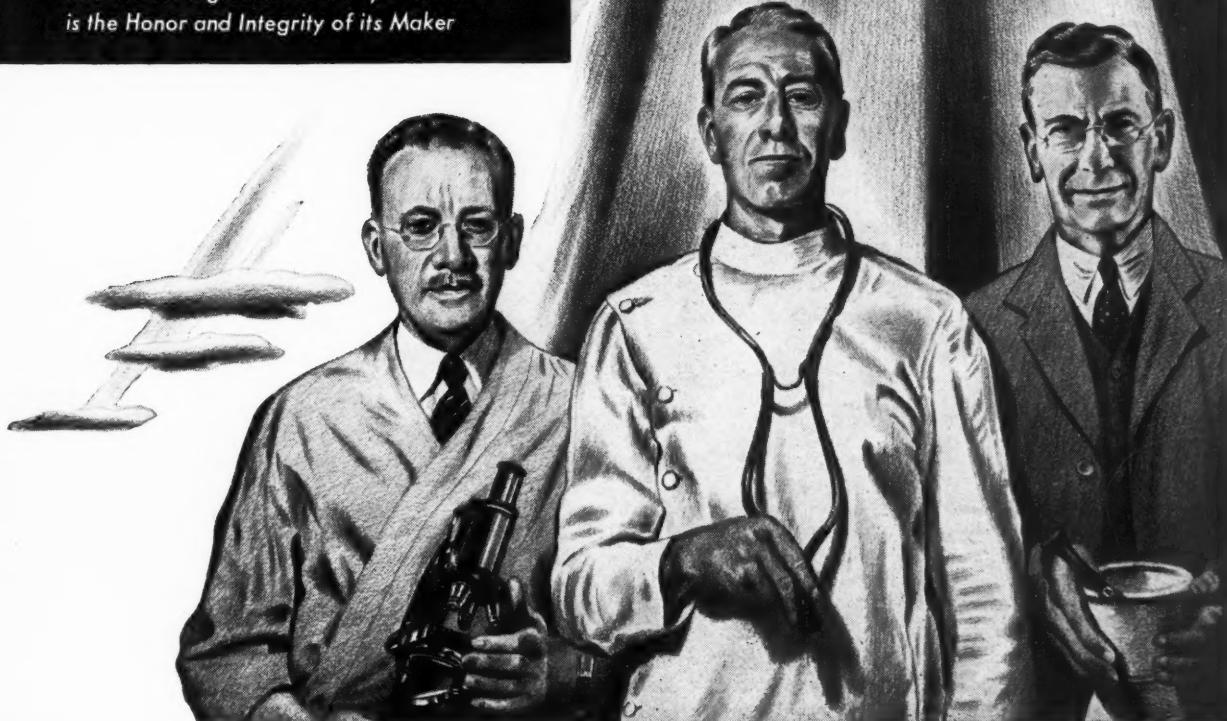
By right of this freedom the House of Squibb, for eighty-five years, has worked in voluntary association with America's Surgeons, Physicians and Pharmacists, toward a richer, fuller life for human beings.

And in the days of peace that are to come, we shall go on working with them, guided by the principle that will always be theirs, and America's:

The right to serve is man's one freedom that must never be denied. For out of free men's devotion to their self-appointed tasks have come the great gifts to all mankind.

E·R·SQUIBB & SONS

*The Priceless Ingredient of Every Product
is the Honor and Integrity of its Maker*



make it difficult or impossible to breathe through the mask. Also, theoretically, one might expect that as the resistance to air flow is increased there would be a greater tendency to breathe around the mask rather than through it, in which case the mask again may serve to deflect bacteria into the air rather than to act as a bacterial filter.

A study¹⁰ was carried out by the department of hygiene and preventive medicine at the State University of Iowa in an attempt to solve the following two problems: (1) to determine the bacterial filtering efficiency of various textiles and materials; (2) to determine the actual resistance to air flow of the same materials.

Tests were first carried out on a new two-layer gauze (42 by 42 strands per inch) mask. Cultures of *B. prodigiosus* (*S. marcescens*) were sprayed into the air as a test organism. The "funnel device"¹¹ was used as the sampling instrument. Two such instruments were used identical in every respect except that the funnel intake of one was covered by the material to be tested. A suitable flowmeter was used so that regardless of resistance created by the material tested the actual air flow would be accurately measured.

Preliminary experiments indicated an equal distribution of organisms within the experimental chamber and an equal sampling by each instrument. The gauze mask was then attached to the funnel intake of one of the sampling instruments. Six seconds after spraying the test organism into the experimental chamber, the vacuum pump was turned on and an equal air flow was maintained through each funnel device ($\frac{1}{4}$ cubic foot per minute).

Theoretically, all readings were in terms of droplet nuclei, for six seconds after spraying the larger droplets, or droplets proper, should have settled from the air. The bacteria drawn into the funnel device were impinged on Petri dishes containing nutrient agar and the difference in bacterial count indicated the bacterial filtering efficiency.

The resistance to air flow was

¹⁰Rooks, Roland; Cralley, Lewis J., and Barnes, M. E.: Hospital Masks: Their Bacterial Filtering Efficiency and Resistance to Air Flow. *Pub. Health Rep.* **56**:1411 (July 11) 1941.

¹¹Hollaender, Alexander, and DallaValle, J. M.: A Simple Device for Sampling Air-Borne Bacteria. *Pub. Health Rep.* **54**:574 (April 7) 1939.

Materials Showing Greatest Possibilities for Mask Construction

	Resistance	
	Filtering to Air Flow	Efficiency in mm. of Water
	Per Cent	Mm.
Cellucotton (8 layers)	97	4.0
Cotton flannel (1 layer) washed 50 times, medium weight, napped on both sides, 40 by 42 strands per inch	98	11.0
Wool flannel (1 layer) washed 50 times, a virgin wool, 42 by 42 strands per inch	100	13.5

measured by covering a small funnel with the material to be tested in such a manner that all of the air would be drawn through this material. With the rate of air flow used (9 liters per minute) and a small funnel area, it was found that the flowmeter used was sensitive to slight changes in resistance.¹⁰

The new two-layer gauze mask was shown to have a resistance to air flow of 1 mm. of water and a bacterial filtering efficiency of 23 per cent. It was found that by washing² by the standard commercial process there was such a marked change in structure of the mask that after 20 washings maximum bacterial filtering efficiency had been reached.

The same mask at this time gave a bacterial filtering efficiency of 74 per cent with an increase in resistance to air flow of 2 mm. of water. As would be expected, by increasing the number of layers there was an increase in both the bacterial filtering efficiency and resistance. A six-layer gauze mask (laundered 20 times) was found to have a bacterial filtering efficiency of 97 per cent and a resistance of 6 mm. of water.

In these experiments it is recognized that the efficiency reported is only relative. In a previous study¹² it had been shown that not all of the bacteria in the air are impinged on the nutrient agar when the funnel device is used as the sampling instrument. In this comparative study factors that might change the effi-

¹²Berry, Clyde M.: An Electrostatic Method for Collecting Bacteria From Air. *Pub. Health Rep.* **56**:2044 (Oct 17) 1941.

ciency of this sampling instrument were held constant so that comparable results were attained.

Of the various materials tested, those showing the greatest possibilities for mask construction are indicated in the accompanying table. Arnold,¹³ using a different testing technic, has reported a 100 per cent bacterial filtering efficiency for six layers of cellucotton. He also suggested that the resistance to air flow was less for cellucotton than for gauze, although this factor was apparently not measured. Our results confirm in large part the findings of Arnold.

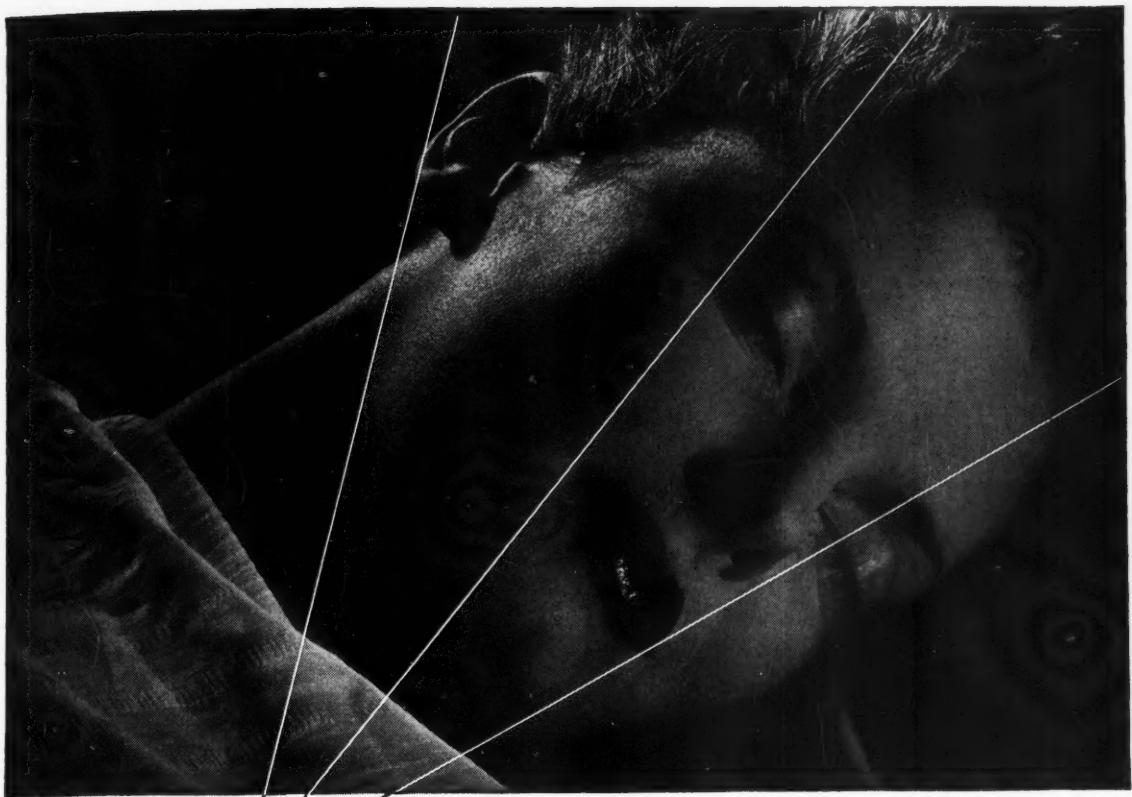
It was found that eight layers of cellucotton gave a bacterial filtering efficiency of 97 per cent, with a lower resistance than 6 layers of gauze. However, cellucotton is easily torn; a suitable frame would have to be devised so that masks constructed of this material would fit snugly about the face and other difficulties would have to be overcome before it could be used satisfactorily for mask construction.

Certain commercial masks were also studied. A commercial mask constructed of a single layer of broad-cloth gave a high resistance to air flow (15 mm.) and a relatively low filtering efficiency (41 per cent). Other commercial gauze masks were found to be constructed of coarser material than the gauze previously studied so additional tests were not carried out.

A commercial mask described as consisting of a single layer of canton flannel, double phased, napped on both sides, 65 by 46 strands per inch, placed between two layers of gauze, was found to have a bacterial filtering efficiency of 98 per cent and a resistance of 11 mm. After laundering 50 times, the mask gave a filtering efficiency of 99 per cent, with an increase in resistance to 15.5 mm.

It was felt at the time of this study that such a high resistance would make the mask uncomfortable, especially to those accustomed to wearing masks constructed of gauze, and that because of this high resistance bacteria might be deflected around the mask. This mask has since been worn for various periods of time in an experimental chamber by persons who were carrying on a research

¹³Arnold, L.: A New Surgical Mask: A Bacteriologic Air Filter. *Arch. Surg.* **37**:1008 (Dec.) 1938.



A sedative-hypnotic that induces calm, restful sleep of normal duration with little likelihood of "hangover" upon awakening—

that's Elixir Alurate 'Roche,' and that is why so many thousands of physicians have learned to depend on Elixir Alurate as a "sedative-hypnotic of rare quality." In therapeutic doses, Alurate, allyl-isopropyl-barbituric acid, does not depress circulation or respiration. Most of the dose is rapidly inactivated in the system and the remainder is so promptly eliminated that likelihood of "hang-over" or cumulative effect is greatly reduced. Elixir Alurate 'Roche' is supplied in 6-ounce and 1-gallon bottles. Alurate Tablets are issued in tubes of 12 and bottles of 50. HOFFMANN-LA ROCHE, INC. • ROCHE PARK • NUTLEY, NEW JERSEY

FOR CALM, RESTFUL SLEEP

problem in which it was necessary to keep all cultures sterile.

None of these individuals has complained as to the mask's being uncomfortable and they have had no difficulty with contamination of cultures. Apparently, bacteria are not deflected into the air around this mask. This is probably due to certain desirable features in design. The mask fits snugly about the face, is sufficiently large and a "pocket" is formed about the mouth and nose

that undoubtedly adds to the comfort.

At least six layers of gauze would have to be used to approach this mask in bacterial filtering efficiency. A mask of this construction becomes rather bulky and it would be difficult from the standpoint of design to fit such a mask properly.

In addition to acting as a bacterial filter and having, if possible, a comparatively low resistance to air flow, the mask should be sufficiently large. One common criticism of the average

gauze mask is that after laundering, owing to shrinkage, it is so small that it must be stretched to cover the mouth and nose adequately.

A few experiments have shown that with this stretching there is a lowering in the bacterial filtering efficiency. In the experiments cited on gauze masks, the material was not stretched across the funnel opening of the testing device. Thus, from this standpoint, maximum bacterial filtering efficiency was reported.

Watch What You're Doing!

CECELIA M. KORTUEM, R.N.

St. Vincent's Infant
and Maternity Hospital
Chicago

THE general cause of accident prevention has been well served by good business sense in the management of industrial operations. Is it not possible to carry over into the laboratory that same good sense of accident prevention?

A suggested accident prevention program has four definite objectives.

1. **To See.** Point out existing hazards to the hospital authorities that they may see.

2. **To Eliminate.** Induce them to eliminate these hazards whenever possible.

3. **To Safeguard.** Caution them to safeguard other persons when it is impossible to eliminate the hazards.

4. **To Avoid.** Creating laboratory hazards can be avoided by having (a) more than one room for the performance of laboratory tests and (b) proper fume hoods, acid cabinets, suitable sterilizers, disposal sewers and centrifuges protected with covers.

There is too wide a gap between knowing the existence of accident hazards and doing something about them. Eliminate, or at least safe-

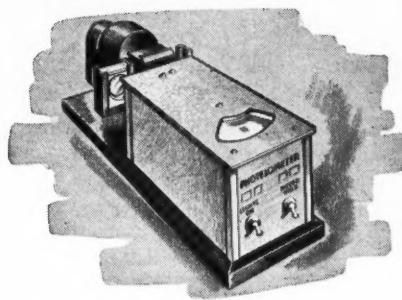
Presented at the January 1943 meeting of the Chicago Society of Medical Technologists.

Don't Let It Happen to You

THE HAZARD

WHY IT HAPPENS

FIRE	1. Reaching across an open flame of a gas or Bunsen burner, with collodion covering a cut or abrasion on the hand or finger.
	2. Letting long sleeves, long fluffy hair come in contact with open flame.
	3. Storing burners improperly. (Some workers store the burner under a shelf and it may be burning when put away.)
	4. Permitting leaky gas connections.
	5. Smoking or half-burning matches that may set fire to other rubbish in wastebasket or may fall inside of empty ether can, causing explosion.
	6. Permitting the sunlight to fall on flasks or on a microscope.
	7. Working with defective electric wiring or bulbs that have dust on the outside and carbon inside.
	8. Smoking cigarettes or pipes.
	9. Not checking on materials that may lead to spontaneous combustion.
	10. Handling inflammable liquids improperly.
DISEASE	1. Neglecting to plug pipettes so that pathologic materials cannot enter.
	2. Using defective hose. (An incident was recorded in which a hose attached to a water faucet came in contact with virulent material, the water back-siphoned and took some of the material into the general water supply.)
	3. Inhaling cultures in which there are spores, as in mycological specimens.
	4. Becoming directly or indirectly inoculated with contaminated organs and claws of animals.
WATER	1. Spilling liquids on floors or work tables, as a fall may bring a fracture, a burn or cut if the worker happens to be carrying glassware or to be working with acids.
	2. Using defective hose. (An incident was recorded in which a hose attached to a water faucet came in contact with virulent material, the water back-siphoned and took some of the material into the general water supply.)
GLASSWARE	1. Taking hold of broken glassware buried in soapy water.
	2. Leaving glassware on towels or cloths.
	3. Dropping glassware on the floor.
	4. Breaking capillary pipettes for coagulation.
MENTAL	1. Worry.
	2. Fatigue.
	3. Overwork.
	4. Improperly fitted clothing and shoes.
	5. Insufficient sleep and rest.
	6. Poor health.



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guard, today, now. Delay may be fatal. Establish improved habits and practices. Have a place for everything and see that everything is in its place.

The seriousness of the accident problem is indicated by the large number of persons who are killed or permanently or temporarily disabled annually. Scientists state that the body, aside from thought, is worth 97 cents in elements. However, the value of life and limb in dollars and cents when removed from the pay roll and added to hospital care causes

an accident to be extremely expensive.

An ounce of prevention being worth a pound of cure, adopt the slogan: "Keep your mind on your work." Remember the possibilities of an accident from fires and explosions from the Bunsen burner. Do not reach across a flame unless you are fireproof. Having more than one room for laboratory experiments permits the simultaneous performance of tests that require open flame and those requiring chemicals that are inflammable.

Be careful in pipetting. With the Caulfield pipetter there is no alibi for accidents. Never permit the water supply to become contaminated. Do not inhale by smelling cultures. Wear a mask or filter and rubber gloves while performing postmortems on animals. Keep the skin free from open cuts, abrasions and burns.

When water is spilled on the floor or table top, wipe it up and do not forget to wipe the edge of the table. Test the temperature of the water from the faucet before washing your hands.

Do not place large quantities of glassware in the laundry water at one time. Have each piece of glassware washed separately and inspected for possible chips. Furthermore, these chips and nicks can be prevented to a great degree by careful handling, which is much more economical. Glassware breakage is the largest item of expense in laboratory equipment.

Knowing that worry and hurry are contributors to accidents, why not learn to relax? You wonder at the audacity of this question when doctors and nurses are waiting patiently and otherwise for the report of a test. There is such a thing as taking your time but hurrying. This can be accomplished by thoughtful procedures, full knowledge of technics and keeping your mind on your work.

Inexperienced workers are, or should be, prohibited from the laboratory. Yet there are many hospitals that employ a medical technologist and an untrained assistant. The technologist is too busy to train the helper properly. Serious accidents have resulted from this inexperienced handling of solutions and culture materials.

Is there any other profession that requires and expects any one person to do the various complicated technics that fall to a laboratory technician? Educational institutes will not permit more than a certain number of subjects to be carried at one time, yet the laboratory technician has to execute accurately eight or ten different procedures at one time.

With the whole world in a mental turmoil every laboratory worker must perform more than is required by duty. But in order to accomplish this we must learn to take at least three minutes of the day and sit quietly, think of nothing and relax. When you feel stuporous and numb



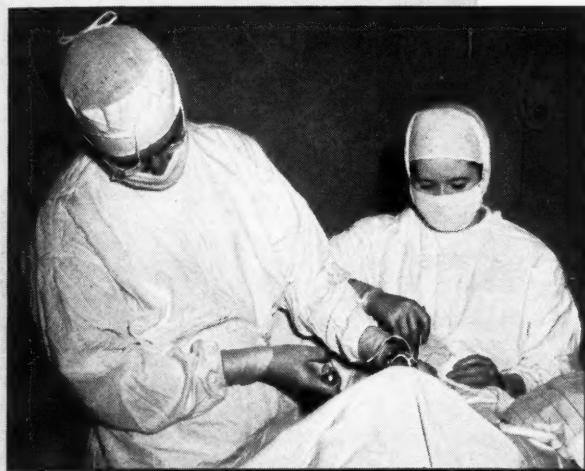
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OBSTETRICS



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Howard W. Haggard, M. D., Harper & Bros.

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1943

● Use of a bed for childbirth was first introduced by Mauriceau. Previously delivery was effected in a chair made for this purpose and often presented to the bride as part of her dowry. Primitive peoples still employ the sitting posture in delivery.

Compare this to the spotless equipment and sterile surroundings in your hospital, and Parke, Davis & Company's dowry to modern obstetrics—PITUSTRIN* and PITOCIN*—almost invariably your staff's drugs of choice when oxytocics are indicated in the management of labor.

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Ampoules of 0.5 and 1 cc. (5 and 10 international oxytocic units) in boxes of 6, 25, and 100.

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from fatigue, which is actually oxygen hunger, go to an open window and inhale deeply of fresh air and blow out the stale air; you will be surprised at the pick-up. Many technicians state that they do not have time for regular physical check-ups, but where there is need there is always a way.

In this time of tension, uncertainty, overtime, overwork, mental and physical fatigue, shortage of doctors, crowded hospitals, it is our patriotic duty as Americans and laboratory technicians to learn to keep fit.

NOTES AND ABSTRACTS

Conducted by the Staff of the Pharmacology Department
Wayne University, Detroit

Protein Hydrolysates

The nutritive significance of the amino acids has received considerable emphasis during the last five years. This has probably been brought about by a more comprehensive understanding of the multitudinous physiologic functions of these hydrolytic products of proteins.

Protein foods have two principal functions to perform. First, they are a source of energy. This is about equal to carbohydrate and far inferior to fat. Energy for muscular work, however, is evolved most economically at the expense of carbohydrate with fat probably running a close second. The nitrogen in protein is a liability and certain uneconomical transformations must occur in the body before the nitrogen-free product can be used as a source of energy. Second, proteins supply indispensable constituents of living cells that cannot be obtained from any other foodstuff.

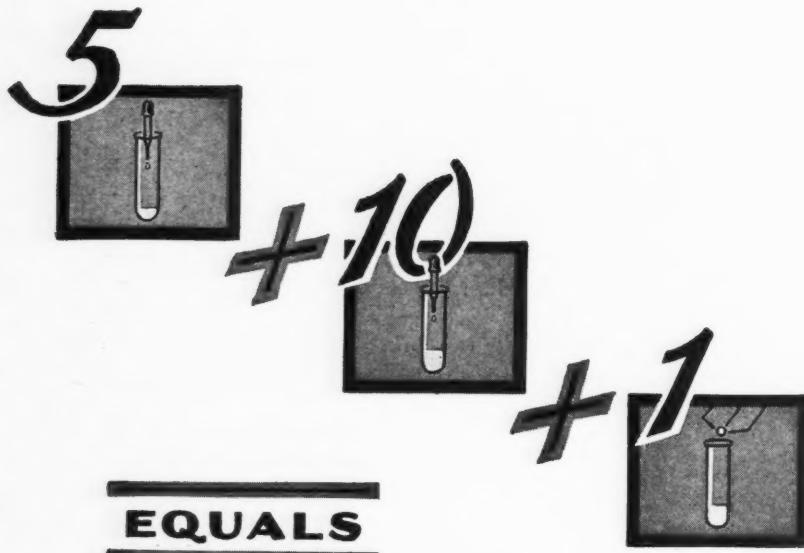
Proteins are probably not stored in the body to any extent. Nitrogen output is about equal to intake and a positive balance exists only if there is a physiologic stimulus for retention. Some of the normal stimuli may be put down as follows:

1. The need for protein foods for the construction of new body tissues during growth.
2. Pregnancy, in which material is in demand for the growth and development of the fetus, as well as of some of the maternal organisms.
3. In adult life, hard muscular work in which the muscular tissue is increasing in size.
4. Replacement of lost tissue in muscular dystrophies.

Apart from the use of proteins as building materials, certain maintenance requirements are necessary. Among these are tissue replacement and repair. In the latter category would come healing processes of whatever nature, such as wounds, burns and ulcers. Regeneration of blood protein constituents, plasma and hemoglobin, offers another important need for protein products.

Plasma protein is of especial importance since it has as one of its functions the maintenance of blood volume and water balance. Any depletion or disturbance in the plasma proteins affects the fluid balance of the body which manifests itself in visible signs of edema. Elman has shown that 30 grams of tissue protein are represented when one gram of plasma protein is lost. Losses may be tremendous from burned surfaces, during hemorrhages, from surgical procedures, inflamed areas, draining abscesses and toxemias. The loss of 1 liter of plasma would mean a concomitant drain of 300 grams of tissue proteins for replacement.

Proteins and their hydrolytic products



CLINITEST TABLET METHOD

For Detecting Sugar (glucose) in Urine
A Copper Reduction Test

A SIMPLE TECHNIC

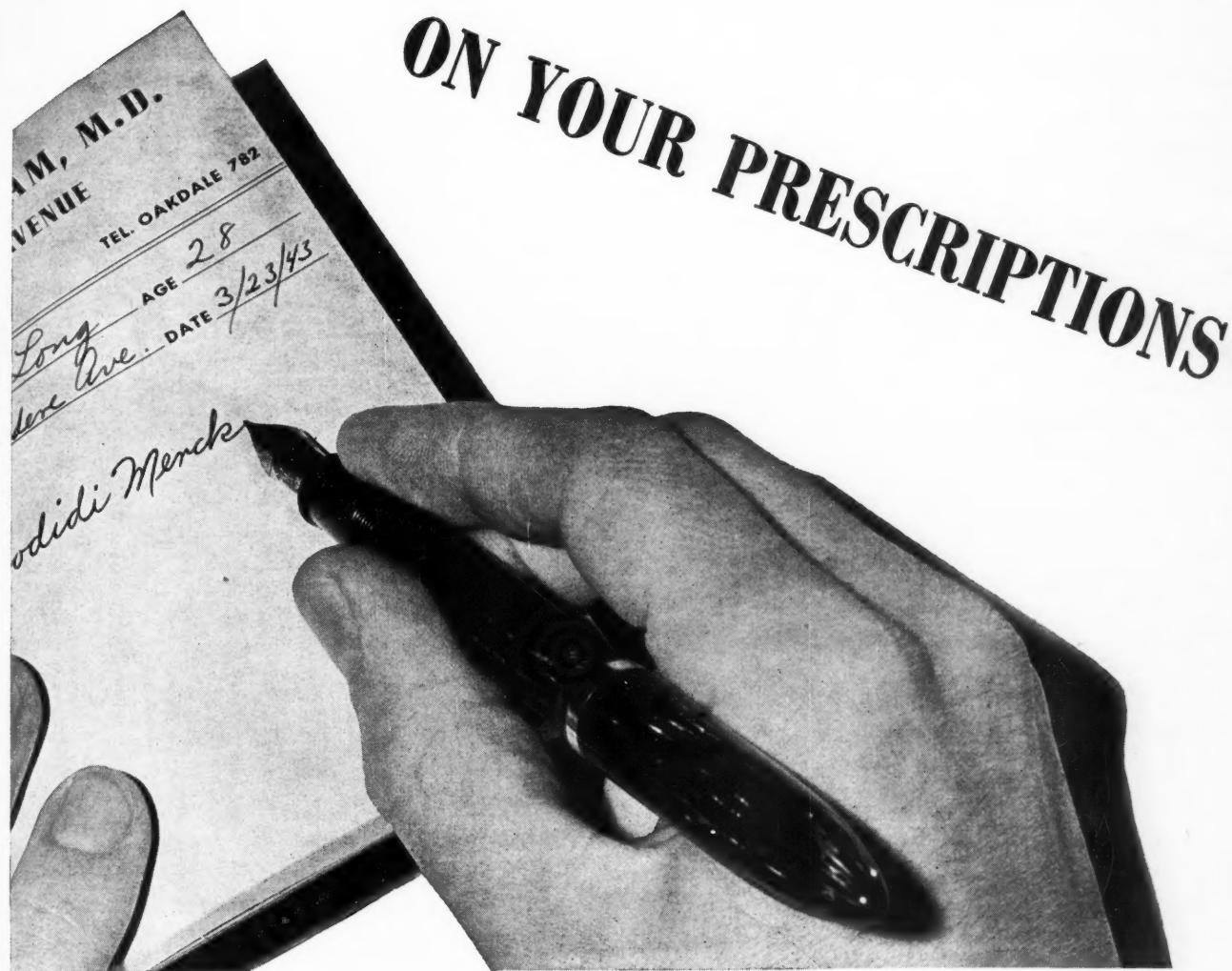
5 drops urine plus 10 drops water plus 1 Clinitest Tablet.

NO HEATING NECESSARY

No external heat is applied because Tablet generates own heat. No measuring of reagents, no liquids or powder to spill, no complex apparatus.

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Urine-Sugar Analysis Set and economical
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In modern analytical laboratories, skilled chemists and technicians are constantly checking the quality of more than 1,500 drugs and chemicals that bear the Merck label. Scores of exacting tests are made in every phase of production—from raw material to finished product—to make certain that every item meets or exceeds the rigid standards established by the Merck Analytical Laboratories.

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also play an important rôle in the production of substances secreted by glands. For instance, it is generally accepted that amino acids are essential in the formation of enzymes and hormones. The hydrolysis of protein in the process of digestion is carried out by enzymes that are protein in nature. Insulin contains at least nine amino acids. Glutathione, which is essential in cell respiration, contains glutamic acid, glycine and cystine.

An amino acid containing iodine, called thyroxine, is closely related to tyrosine. This substance secreted by the thyroid plays an important rôle in the

physical and mental development of the growing child. Epinephrine and its close relationship to phenylalanine and tyrosine may also be cited. Since only minute amounts of these substances are found in the body, the demand for protein in this regard is small but is of a constant nature during life and varies somewhat according to the circumstances.

At least one more important function of amino acids must be mentioned and this is the furnishing of necessary agents for detoxication of harmful substances in the body, whether they are produced by bacteria, exist as metabolites or are administered as drugs. The liver plays

a major rôle in these processes and, unquestionably, hydrolytic constituents of proteins are called upon to furnish the adjuncts in the detoxication mechanisms.

The possibility exists that while the body is capable of synthesizing all amino acids in amounts sufficient for its needs, there may come a time when certain essential members of the group are needed in excessive amounts. These quantities may be larger than can be normally elaborated or some abnormal situation may exist that impairs production. While it is hazardous to guess the minimum requirements of protein needed daily for tissue maintenance, it has been established that from 0.5 to 0.7 gram per kilo is adequate for adults.

Because nature does not deal in minimums 1 gram is probably a better estimate, ensuring a good margin of safety. These 70 to 100 grams of protein are normally supplied daily if the dietary habits are good. Deficiency can arise through an inability to eat enough food or retain the food ingested. Faulty metabolism and inability to recombine the hydrolytic process of digestion may also be responsible for depletion of body proteins. In this latter category dysfunctions of the liver and impairment of digestion are important contributory causes.

The course of amino acids on the way to resynthesis of indispensable body constituents has not been followed. However, the acids are absorbed from the blood stream by rapidly growing tissues, and nitrogen for regenerating such proteins is derived from these acids. It has been reasoned that since digestion consists of a breakdown of proteins by ferments into the constituent amino acids, resynthesis of the protein can be accomplished by supplying the body with suitable building material by a reversal of the enzymatic processes.

Based on this hypothesis, protein hydrolysates have assumed considerable importance in certain therapeutic procedures in supplying the necessary nitrogen to maintain equilibrium.

One of these abnormal states in which protein wastage reaches beyond the body's capacity to replace is in shock. At present, plasma injections hold a front rank position in the therapeutic armamentarium. Plasma does help to maintain blood volume and stabilizes osmotic forces within the body. At the same time protein necessary for the normal environment is supplied to the tissue cells. Under such conditions if these cells could be provided materials for replacement and repair without the aid of the digestive tract the advantages scarcely need be mentioned.

Experiments in this direction by Madelen and co-workers with casein digests have shown that it is possible to promote the production of plasma proteins by

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Clinical reports attest the value of this new bactericide-wetting agent solution. It is effective for either prophylaxis or treatment of localized infection and is especially indicated where dispersion and removal of pus and débris from infected wound surfaces and cavities are essential. Physicians will find wide use for this stable chlorine solution as a lavage during surgical débridement, for irrigations and instillations, for wet dressings, and for hot compresses.

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injection of the digests in hypoproteinemic dogs. The effectiveness of the amino acids in replenishing depleted body protein points to superior methods in the treatment of these conditions.—ARNOLD J. LEHMAN, M.D.

CLINICAL BRIEFS

Conducted by E. M. Bluestone, M.D.

Hospitals in Public Health

The modern hospital, although a direct descendant of the retreat for the homeless sick of the Middle Ages, is essentially a twentieth century development. As late as the middle of the nineteenth century there were fewer than 150 hospitals in this country, of which one third were institutions for the mentally ill. The mortality was appalling.

In 1940, on the other hand (according to the statistical bulletin of the Metropolitan Life Insurance Company for February 1943), the combined fatality rate for all causes, for all hospitals, based on 11,600,000 in-patients, was less than 5 per cent. Viewed another way, more than one third of the total deaths of that year occurred in hospitals. This was because of the seriousness of the illnesses for which patients were hospitalized.

The proportion of deaths occurring in hospitals varies within wide limits. It is particularly high for surgery, reaching a maximum of 88 per cent for fatal cases of appendicitis—all too often the result of bringing the patient to the hospital too late. Diabetes also has shown a high proportion, owing probably to the serious surgical complications; cerebrospinal meningitis and infantile paralysis likewise exhibit a high ratio, although this is due to the fact that the law of many localities requires hospitalization.

The modern hospital is much more than a place for the care of the sick. It has become the center for the study of disease in all its manifestations, for the development of methods of diagnosis and treatment, for medical and nursing education and for medical social service. Urgent new needs have arisen as a result of the war. Many special problems in war medicine are being studied in hospital laboratories. Tropical medicine has come to the fore and tropical diseases are being seen for the first time in many sections of the country.—SIGMUND L. FRIEDMAN, M.D.

Using Red Blood Cells

The red blood cells, which have been made available in large quantities recently by the extensive use of human plasma, have for the most part been

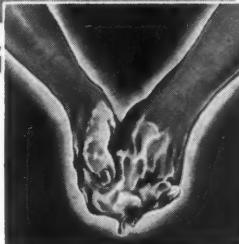
discarded. Attempts to prevent this waste have been made in the past few years by both British and American workers and have consisted mainly of transfusions of red cells suspended in saline solution.

The main value of such transfusions is the increase in the erythrocyte count in patients with marked anemia. One might, for example, give daily transfusions of red blood cells. Spontaneous recovery in such a case ordinarily takes at least six weeks. With the new method, restoration of the erythrocyte count to normal would occur within a few days. The English workers have used red

blood cell transfusions in concentrated form, *i.e.* with little or no addition of saline solution. This appears to be particularly advantageous for patients with cardiac insufficiency.

But, as H. T. Alt points out in the article, "Red Cell Transfusions in the Treatment of Anemia," in the *Journal of the American Medical Association* for June 12, 1943, the chief advantage of this type of transfusion is the factor of economy. For, should red cell transfusions come into common use, it will be possible to divide the cost of whole blood between plasma and red cells.—SIGMUND L. FRIEDMAN, M.D.

Beneath his gloves HANDS SURGICALLY STERILE



THE doctor who scrubs his hands with Germa-Medica before slipping them into rubber gloves, *doubly* protects himself and his patient from infections.

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The fact that more than 60% of America's hospitals use Germa-Medica proves that doctors and superintendents appreciate its added protection. So switch to Germa-Medica—*now*—for a stronger bulwark against infections.

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NEWS IN REVIEW

Urge All Nurses' Aides to Enroll in the U. S. Citizens Defense Corps

By EVA ADAMS CROSS
Washington Representative, The MODERN HOSPITAL

WASHINGTON, D. C.—All volunteer nurses' aides should be enrolled in the nurses' aide unit of the U. S. Citizens Defense Corps of the communities in which they reside was the pronouncement of Dr. George Baehr in a circular distributed June 21 to regional directors, medical officers and nurse deputies. Enrollment should not be limited to nurses' aides assigned to mobile medical teams, casualty stations and other field casualty units of the E.M.S.

It has been recommended that, upon completion of their required training, nurses' aides receive their Red Cross certificates and be admitted to membership in the U. S. Citizens Defense Corps in a joint ceremony. The oath required for membership in this body should be administered at the graduation ceremony. Also, all volunteer nurses' aides who have completed their training since the program was initiated but who have failed to enroll should be enrolled.

Enrolled members of the nurses' aide unit of the C.D.C. are eligible for the benefits provided under the War Civilian Security Program of the Federal Security Agency for all members of the corps who may be injured in line of duty.

The benefits of the War Civilian Security Program are also extended to trainees registered for a course of training prescribed and approved by the director as prerequisite for membership in the U. S. Citizens Defense Corps. Nurses' aides are, therefore, eligible if properly registered.

The joint O.C.D.-Red Cross Nurses' Aide arm insignia may be worn by enrolled members of the Nurses' Aide Unit of the C.D.C. on outdoor dress to identify them as members of the corps. Volunteer nurses' aides assigned to Mobile Medical Teams and Casualty Stations may wear either the medical unit arm band or the nurses' aide insignia. All nurses' aides *must* wear either the medical unit arm band or the nurses' aide insignia in order to move during periods of air raid alarm.

Calvin Withdraws From Race

Arthur M. Calvin, executive director of the Minnesota Hospital Service Association, has withdrawn as a candidate for the presidency of the Minnesota Hospital Association. Dr. Thomas Brodie, superintendent of Ancker Hospital, St. Paul, has been nominated and, it is reported, will accept the nomination.

Nonprofit Hospital Care Plan Established in Puerto Rico

Latin America's first nonprofit hospital insurance plan has been organized in Puerto Rico under a law signed by Gov. Rexford G. Tugwell.

Incorporators of the association are: Felix Lamela, Dr. J. Rodriguez Pastor, Antonio Lucchetti, Virgilio Brunet, Dr. Manuel de la Pila Iglesias, Dr. David E. Garcia, Dr. Ricardo F. Fernández, Dr. E. Garcia Cabrera, Dr. Josefina Villa-fañe, Mrs. Ana Alfonso, Maria Pintado de Rahn, Samuel E. Badillo and Dr. Antonio Martinez Alvarez.

A yearly fee of \$6 for unmarried persons and \$12 for a man and wife, together with all children under 21 years old, will pay for any hospital services needed up to twenty-one days of treatment.

Maternity care is included after the woman has been a member of the association for one year.

The association was planned to go into operation in July.

Physicians May Prescribe Supplemental Foods—O.P.A.

WASHINGTON, D. C.—Any medical practitioner authorized by the state in which he practices to prescribe all internal drugs is also authorized to certify that a person requires supplementary food rations for health reasons, announced the Office of Price Administration July 2. Thus, osteopaths may make such certification in certain states.

The action to include osteopaths is taken in Amendment 44 to RO 13 and Amendment 44 to RO 16.

In some counties the work of ration boards in processing applications for supplemental food rations has been greatly expedited through the voluntary help of the doctors themselves. Responsibility for issuing extra rations for reasons of health has been kept on a professional level by the establishment of panels to review all medical certifications and to advise the ration boards.

Medical Students Deferred

Two year deferments of medical and dental students were authorized on July 17 by Paul G. Armstrong, state director of Selective Service, in a directive sent to local draft boards throughout the state of Illinois. The student must be able to complete his course within the two year deferment period. Preprofessional students may also be deferred if they present evidence that they have been accepted for entrance by a recognized professional school.

Simplify Practices on Manufacture of Surgical Furniture

By EVA ADAMS CROSS
Washington Representative, The MODERN HOSPITAL

WASHINGTON, D. C.—Models of surgical, medical and related furniture that may be manufactured of critical materials were listed July 13 by W.P.B. Heretofore, use of metals in the manufacture of surgical and medical furniture and related equipment was controlled by Order M-126, restricting use of steel, and Order L-62, controlling production of household furniture.

Schedule 3, issued July 13, clarified the situation regarding such furniture as it is affected by these two orders and, by listing approved models, it promotes conservation and simplification practices. It prohibits the use of critical metals in the manufacture of items of such equipment other than those named on List A, attached to the schedule, and limits the number of models of each item that may be produced.

There is no prohibition on the manufacture of any number of models of the items listed or of items unlisted where the only metals used are iron and carbon steel and the weight of iron and steel is not more than 25 per cent of the total weight of the article.

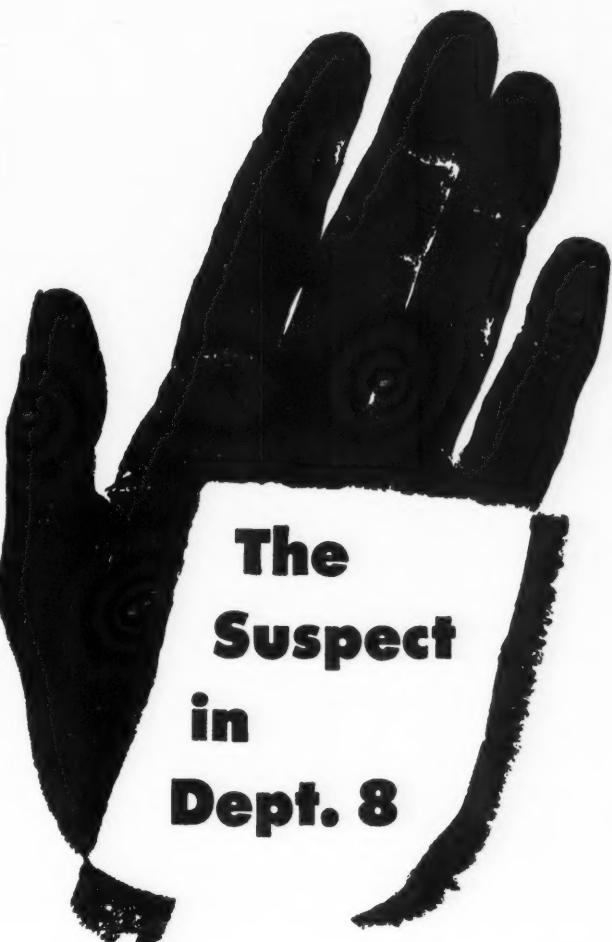
Manufacturers are required to file with the War Production Board photographs or catalog cuts of the models of items named on List A which they elect to produce.

New W.M.C. Division Is to Allocate All Nursing Service

WASHINGTON, D. C.—The Nursing Supply and Distribution Unit of the War Manpower Commission, which was set up on February 2 with Alma C. Haupt in charge, has been changed to the Nursing Division of the Procurement and Assignment Service of W.M.C. according to an announcement July 23.

The new division will have the same objectives as the other divisions of the P. and A. Service, namely the proper allocation of nurse power to the armed forces and civilians and the clearance of all nurses who wish to go into the Army and Navy Nurse Corps. Recommendations regarding the operation of the nursing division will be made to the directing board of P. and A. by a nursing advisory committee. Similarly, the nursing division will be represented on all present advisory committees concerned with problems affecting nurses.

Katherine Tucker of Philadelphia and Laura Grant of New Haven have been appointed to the directing board to represent nursing. Louise Baker has been named assistant executive officer of P. and A. under the directing board and Dr. Maxwell Lapham, chief executive officer.



... is guilty until proven innocent of harboring pyrogens and foreign bodies. *No* bottle of Abbott's Intravenous Solutions is *ever* assumed to be pure until its batch has been subjected to rigid tests . . .

tests not limited to examinations of the completed solution, but to *each step* in the manufacturing process from selection of raw materials in the stockroom to packing the containers in a boxcar for shipment. In the interim, control chemists, impressed with their responsibility, make pharmacological and biological tests; pH determinations; tests for dissolved chemical impurities; light-inspections of each finished container for color, clarity and freedom from foreign particles; and vaccum-tests on each cap to insure an airtight fitting . . . All this, to guarantee you the utmost purity and sterility so necessary to avoid dangerous reactions in use. It pays us and it will pay you to *pay a premium for purity*. ABBOTT LABORATORIES, North Chicago, Illinois.

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Alert maintenance men choose Devopake because it saves time and money. The *spreading quality* of Devopake cuts gallonage; application time is lessened by its *big brush workability*. Because it's a *self-sealing primer and finish coat all in one* the usual preliminary undercoating is eliminated. Man hours, vital during war times, are saved.

Devopake is an *oil-base* paint. You can depend on it to give walls the utmost protection . . . condition them to withstand repeated washings. Today Devopake is manufactured in 7 practical colors.

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by our customers' experiences. Discover for yourself
the many advantages of this outstanding Devoe paint.*

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New Orders Regarding Stretcher Teams Are Issued by O.C.D.

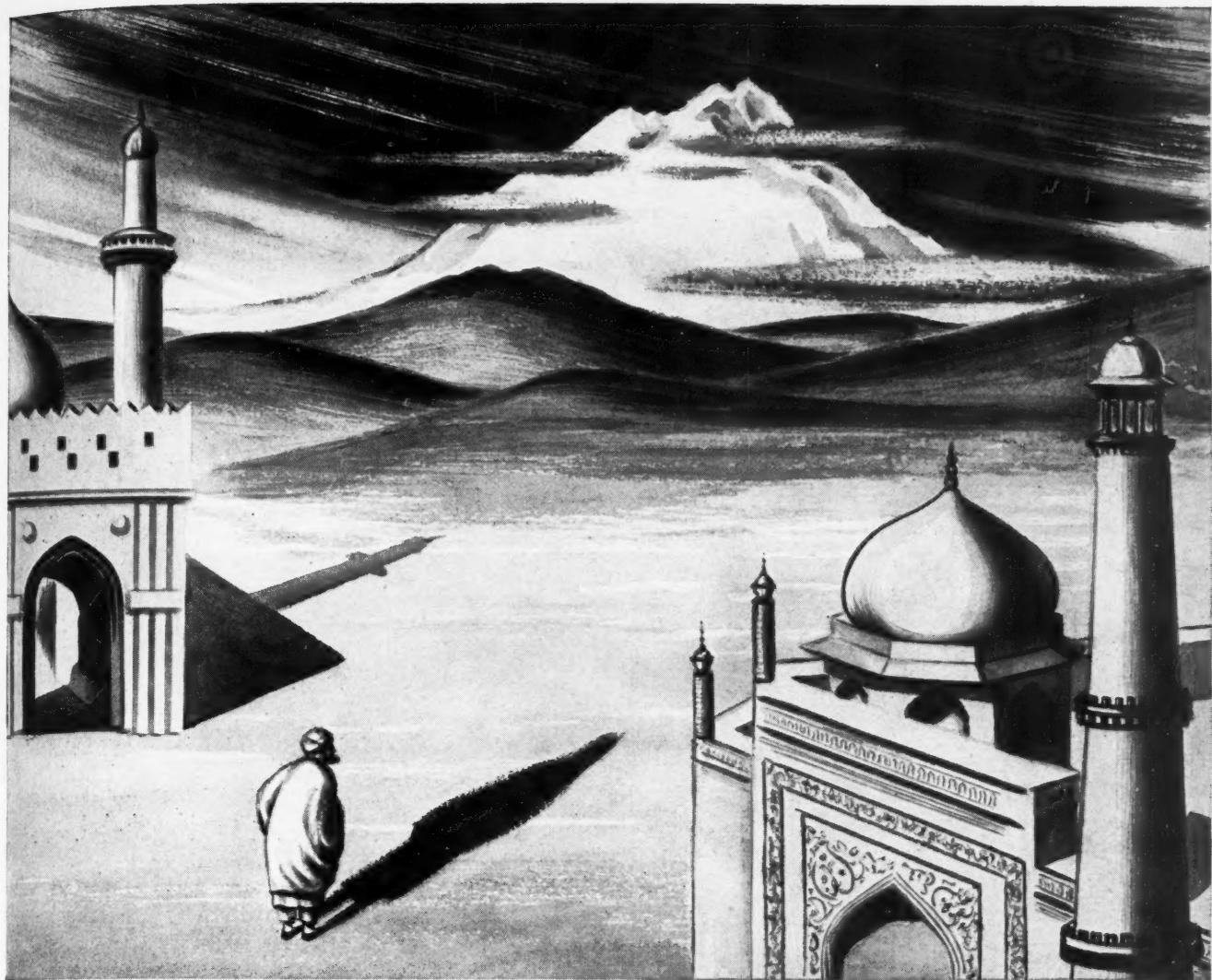
WASHINGTON, D. C.—Instructions that supersede previous statements covering the organization, functions and relationships of stretcher teams were issued June 30 by O.C.D. Duties previously assigned to stretcher teams (at incidents in which the majority of casualties are trapped or buried) will be assumed by rescue squads of the Rescue Service of the Citizens Defense Corps. The stretcher teams, however, remain an essential part of the E.M.S.

A stretcher team is composed of a leader and four other persons, preferably men or older boys, one of whom is designated as assistant leader. No member of a hospital staff who has any maintenance function should be selected for such duty. Such teams should be attached to each casualty receiving hospital and each casualty receiving station. The number of teams attached to a casualty receiving hospital should be determined in consultation with the administrator of the hospital and should be based on the number of casualties the hospital can receive and the nature and extent of the duties the administrator expects team members to perform. For the casualty station, two teams should be on call during the day and two during the night.

The teams attached to casualty receiving hospitals are responsible to the administrator; they are under his direction or the direction of such person as he designates. Those attached to casualty stations are responsible to the administrator of the hospital to which the casualty station is related or to the physician in charge of the mobile medical team at the casualty station when it is activated. At casualty stations not related to hospitals, stretcher teams are responsible to the physician in charge of the station. At incidents, they are responsible to the physician in charge at the scene.

Shriners Increase Hospital Fund

An additional \$1,000,000 has been appropriated by the 310,000 North American members of the Ancient Arabic Order of Nobles of the Mystic Shrine to carry on the work of their 15 hospitals for crippled children. Albert H. Fiebach, retiring imperial potentate, informed delegates to the Shriners' annual meeting held in Chicago in July that the hospitals' endowment has been increased by \$4,000,000 during the year. Twelve of the 15 hospitals, which accept only children under 14 years of age whose parents cannot pay for treatment, are located in the United States, two are in Canada and one is in Hawaii.



We're one up on Mohammed!

Mohammed couldn't budge the mountain . . . but *Wyandotte* can, and does, every day! Moves a "mountain" of dirty *dishes*, stacks of silverware and glasses . . . puts them back in circulation double-quick, sparkling-clean.

Most important of all, *Wyandotte* dishwashing compounds are *miserly* with money. Made to operate at top efficiency from first ounce to last, they produce maximum results with a minimum of material.

What's your washing method? If it's by machine, and your water supply is "hard,"

you'll want the help of *Keego* . . . a wonder-worker at discouraging stains and keeping equipment free from lime-scale deposits. Where water is of average hardness, *G. L. X.* will serve you well. Thorough-rinsing, and especially fine for making glasses shine!

Should your dishes be done by hand, either *H. D. C.* or *G. L. X.* is the answer. *H. D. C.* makes suds, contains soap; *G. L. X.* makes suds, contains no soap. Invite your local *Wyandotte* Man to put any of these speedy compounds through their paces for you today!



Wyandotte

SERVICE REPRESENTATIVES IN 88 CITIES

WYANDOTTE CHEMICALS CORPORATION
J. B. FORD DIVISION • WYANDOTTE, MICHIGAN

• Wyandotte Chemicals Corporation consolidates the resources and facilities of Michigan Alkali Company and The J. B. Ford Company to better serve the nation's war and post-war needs.

Inventory Adjustments on Dry and Dehydrated Fruits Will Be Made

WASHINGTON, D. C.—O.P.A. announced July 3 that inventory adjustments will be made in the case of institutional users having ration points tied up in dry and dehydrated fruits which on March 29 were removed from rationing and are not now rationed.

The local ration board may make such adjustments provided: (1) the institutional user had an excess inventory, part of which was in dry and dehydrated fruits, when he registered in

March, at the start of processed food rationing; (2) he still had such foods in his inventory when they were removed from rationing on March 29. The local board computes an adjustment in the following manner:

1. The amount of dry and dehydrated fruits, in pounds, that an institutional user carried over from March 1 to March 29 will be multiplied by 18, the average point value of this class of merchandise before exemption from rationing.

2. The resulting figure is then subtracted from the institutional user's excess inventory, which is carried in points.

If the amount deducted exceeds the

amount of the excess inventory, the board will issue a point certificate to cover the difference. Thus, the effect will be to reduce the excess inventory of an eligible institutional user and, in some cases, to give him additional point purchasing power, depending upon the amount of dry and dehydrated fruits held in stock.

Civilian Defense Workers

Eligible for Hospital Care

WASHINGTON, D. C.—A broad War Civilian Security Program was announced early in May by the Federal Security Agency to provide needed care and financial assistance to civilian defense workers injured on duty.

Any O.C.D. worker or person in training for O.C.D. work injured in line of duty is eligible for needed medical and hospital care. The medical care will be administered by the U. S. Public Health Service through the Emergency Medical Service. The injured person may obtain medical care from the physician or hospital of his choice.

Reasonable rates will be paid to hospitals for ward care, usually the rates specified in the state workmen's compensation schedule. Complete medical care is to be provided, including nursing, transfusions, drugs and physicians' services. Family allowances and funeral benefits are also provided.

Hospitals do not need to apply a "means" test or to wait for specific authorization. Bills are to be submitted in triplicate to the local director of Emergency Medical Service, who can authorize extra service over the minimum provided when it is required.

Dr. George Bachr states that "individuals who are registered as members of the nurses' aide unit of Civilian Defense Corps and who have taken oath are eligible for insurance if injured while on service in hospital or in training. Service in hospital or in training is considered line of duty."

Plans for Wayne University County Hospital Are Advanced

Plans to construct the proposed new Wayne University County Hospital, Detroit, were advanced in May when the ways and means committee of the Wayne County board of supervisors voted its general approval of the plan and appointed a subcommittee to make a more careful study of the project.

Approval of the hospital, to be operated by the university college of medicine, was recently given by the board of education which sanctioned the general plan for the proposed Detroit Medical Center to be constructed on a 50 acre site on Jefferson Avenue.

"Puritan Maid" Anesthetic, Resuscitating Gases and Gas Therapy Equipment

PURITAN COMPRESSED GAS CORPORATION

BALTIMORE BOSTON CHICAGO ST. PAUL DETROIT CINCINNATI KANSAS CITY ST. LOUIS NEW YORK

PURITAN DEALERS IN MOST PRINCIPAL CITIES

"Buy with Confidence"



That the wounded may LIVE!

ON every fighting front, plasma has saved the lives of countless wounded men. It is amazingly effective in treatment of shock; can be used without regard to blood type; is easier to transport and use than whole blood.

Plasma's possibilities for peacetime relief of suffering and post-operative treatment seem equally boundless.

From the moment blood is taken—whether for typed whole blood for blood banks, or for processing into dried or frozen plasma—refrigeration is vital. And from the time of the first blood bank, G-E engineers and G-E refrigeration have played an important part in this great medical development.

If your hospital is planning a blood bank, you can turn to G-E with confidence for advice—for dependable refrigeration.

GENERAL ELECTRIC

Listen to the General Electric radio programs: "THE HOUR OF CHARM", Sundays, 10 P. M., EWT, on NBC... "THE WORLD TODAY" News, Weekdays, 6:45 P. M., EWT, on CBS

You should have this valuable bibliography in your hospital...



"Storage and Transfusion of Blood and Plazma" contains a reference list of nearly 650 articles dealing with all phases of the subject. It also contains information on G-E refrigeration and a list of suppliers of blood bank cabinets using this equipment. Send the coupon for your copy—it's FREE.

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General Electric Company
Air Conditioning and Commercial Refrigeration Divisions
Section 3678, Bloomfield, N. J.

Please send me a free copy of your new Blood Bank Bibliography.

Name _____

Hospital _____

City _____ State _____

How to Handle Applications for New Construction Projects (Continued from page 49)

could be added and number of bassinets which would then be reserved for new-born.

3. Is any space in the hospital used for graduate nurses, student nurses or other personnel? Could this space be used for patients?

4. Data from last report to A.M.A.: number of beds, number of bassinets, date of report.

5. Explain changes in present capacity (answer to 1) from last report to A.M.A. (answer to 4) giving dates on which changes occurred.

6. Give number of operating rooms, delivery rooms, labor rooms.

7. Service rendered for each month of present year and annual totals for two preceding

years: period covered, total patient days (including new-born), new-born patient days, average length of stay (medical, surgical, obstetrical), per cent occupancy.

Give complete description of new facilities showing number of beds, bassinets and other facilities to be built.

Give other hospital facilities in locality and population changes.

1. Give following information for each hospital (excluding mental and tuberculosis hospitals) in your county and in adjoining counties in your state that lie wholly or partly within a 25 mile radius of your hospital (include facilities not now in operation): (a) name and address of hospital; (b) number of beds and bassinets now installed and number of bassinets reserved for new-born; (c) total number of patient days of service rendered during latest

twelve month period for which data are available, giving dates, and number of days' service for new-born included in above; (d) per cent occupancy; (e) average length of stay of patients; (f) beds not included in 1b (if none, indicate this fact) or beds constructed, under construction or approved for construction with dates when they will be available; (g) number of beds included in 1b that were formerly in operation and are not now owing to closing of institution, shortage of doctors, shortage of nurses or for any other reason.

2. (a) Give 1940 population figures, showing urban and rural separately, for your county and for each adjoining county in your state that lies wholly or partly within a 25 mile radius of your hospital; (b) give population estimates of above counties based on latest ration book distribution.

Nurses' Homes

1. Give number of student nurses in training a year ago and now.

2. Is it planned to increase the number of student nurses in training and, if so, by how many?

3. Has the plan for increasing students in training been approved by the appropriate state organization?

4. Give the total possible number of beds in present nurses' home now occupied by each of the following: graduates, students, others.

5. Have efforts been made to lease suitable quarters to house nurses? If not, give reasons.

6. Is there available for purchase or lease an existing property with a building that might be converted to hospital use as an annex, etc.?

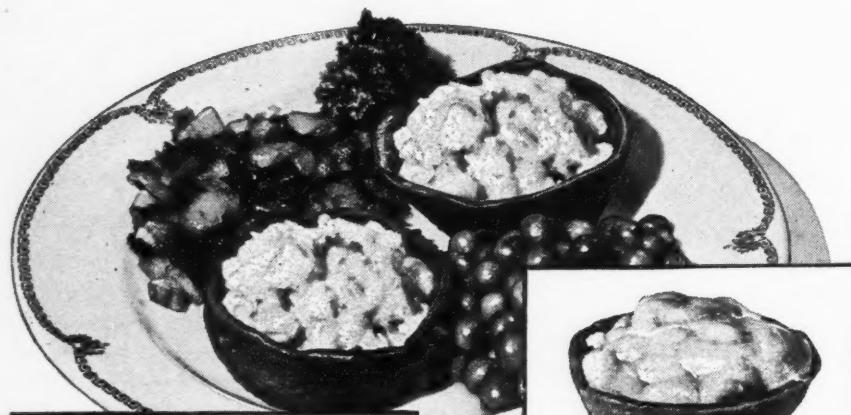
Pharmacy Corps Bill Signed

WASHINGTON, D. C.—Having received the President's signature July 13, H.R. 997, the bill that provides for the establishing of a Pharmacy Corps in the Medical Department of the Army, is now law. It passed the Senate July 3 with one amendment. The bill proposes that there shall be 72 officers in the corps, ranking from second lieutenant to colonel and that the Medical Administrative Corps of the Regular Army be abolished. Members of the Medical Administrative Corps will continue their administrative duties and members of that corps in the Regular Army will be transferred in grade to the Pharmacy Corps. Under the new legislation all additions to the Pharmacy Corps will be from licensed pharmacists commissioned in accordance with examinations and specifications to be determined by the Secretary of War.

Public Health Program Outlined

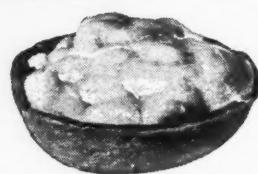
"New Ventures Toward Health Security" and "Postwar Planning" will be two of the subjects to hold the attention of delegates at the meeting of the American Public Health Association in New York City, October 12 to 14. Other special sessions will deal with current health department problems in war and tropical and imported diseases. A "Convention by Radio," during which the transactions, resolutions and as much as possible of the program will be broadcast to members at home, is also planned.

Hot Bologna Cups Make Delicious Low-Point, Low-Cost Meals



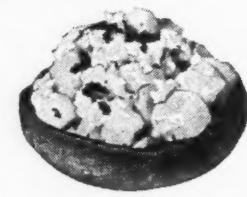
STAR BOLOGNA CUPS

Filled with Scrambled Eggs served with
Lyonnaise Potatoes and Peas
Cost as low as 16 to 19 Cents



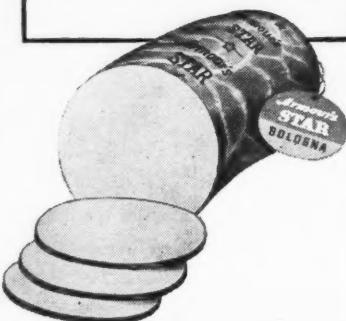
STAR BOLOGNA CUP

Filled with Lima Beans
Topped with Melted Cheese



STAR BOLOGNA CUP

Filled with Hot or Cold
Potato Salad



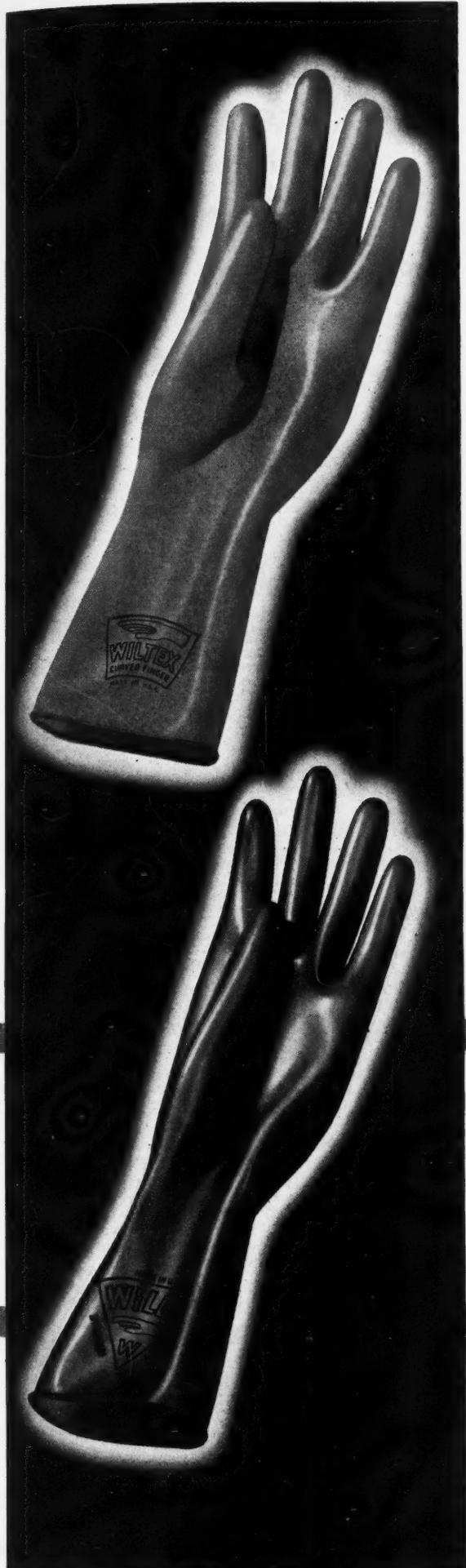
Send for Free Recipes

For hearty, big-looking, low-cost meals, learn the secret of making bologna cups! The quantity recipes are free...created by Jean LeSparre, internationally known chef.

These are days to plan more and more meals around Armour's Star Bologna. Star Bologna is one of your best low-point buys...it gives you the most servings per pound. Nutritious and rich in flavor...made of quality meats. Your guests will welcome its fine meat flavor. Send for free Star Bologna quantity recipes today. Address Hotel and Institution Department, Armour and Company, Union Stock Yards, Chicago.



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OF QUALITY PRODUCTS WILL HELP REDUCE YOUR COSTS

That has been true always—but today it becomes a necessity to buy products that, through their proven quality, last longer. In doing this you save in several ways. First, the longer life of these quality products such as Wiltex or Wilco Curved Finger Latex Gloves naturally reduce your costs; and second, in buying longer lasting quality products you help in the important material conservation program so vital to the war effort. Yes, you help yourself and your Government when you rely on "wise buying." . . . We suggest you ask your Surgical Supply Dealer for long lasting Wiltex White or Wilco Brown Latex Gloves. Their curved finger styling gives added comfort and reduces hand strain.

★
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U.S. SAVINGS STAMPS
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OFFICIAL ORDERS

June 15 to July 15

Air Conditioning.—A recent amendment to Order M-28 barred delivery of Freon to any "comfort" cooling system after June 5. However, operators of essential refrigerating and air conditioning systems will find Freon more available in July than in June. Parts for emergency repairs for hospitals may be obtained under C.M.P.-5A.

Boilers.—High pressure boilers were limited by Order L-299 on July 1 to thicknesses and quantities of steel not exceeding the minimum standards of the American Society of Mechanical Engineers. On July 3 an amendment to L-187 permitted the manufacture of low-pressure cast iron boilers for the remainder of the year at a monthly rate not over 100 per cent of the corresponding month of 1940. Hospitals must file PD-704 to purchase low-pressure cast iron boilers.

Coffee.—A coffee bonus was authorized by O.P.A. on July 7 for institutional users. It amounts to 20 per cent of the total amount of coffee that any Group II or Group III user obtained in his July-August allotment, including any supplemental allotment. It will be available when the users apply, on or after August 15, for their September-October allotment.

Construction.—Requirements for construction projects should be in line with the revised version of "Critical Construction Materials Design Guide," the W.P.B. stated on July 8. Similarly, lighting requirements should follow the policy outlined in "Design Guide for Interior Electric Lighting and Wiring for War-Time Construction." Copies of either guide may be obtained from the W.P.B. Conservation Division, 1100 H Street, Washington, D. C. Much time will be saved by following these guides.

Cooking Equipment.—Hospitals were offered a concise guide on June 25 in selecting food storage, cooking and serving equipment under current W.P.B. rulings. Copies may be obtained from the W.P.B. Conservation Section.

Electrical Supplies.—Since June 30 all rated orders for electric wire and cable have been invalid unless accompanied by an allotment of materials under C.M.P. W.P.B. announced on that day that the copper situation is tight. Electric fans are now being produced only for shipboard use or for such essential users as hospitals.

Gas Cylinders.—Interpretation 1 of Order M-233, issued June 25 by W.P.B., points out that a preference rating for maintenance, repair and operating supplies may not be used to obtain a gas cylinder from manufacturers. No gas cylinders may be manufactured or delivered except as specifically directed by W.P.B. on Form PD-662.

Laboratory Material.—P-43, as amended June 28, assigns preference ratings and allotment symbols to laboratories to assist them in obtaining all materials and equipment needed to carry on scientific or technological activities. Laboratories carrying on work essential to the war are also given serial numbers, thus permitting them to use a higher preference rating. Order L-144 was amended on the same date to prohibit the delivery of one or more of any one item of laboratory equipment costing over \$50 or, on a single purchase order, of various items of laboratory equipment costing over \$200 unless authorized by W.P.B. on Form W.P.B.-1414. Laboratories with serial numbers are exempted from this order except for equipment named on List A attached to the order.

Laundry Machinery.—Laundry machinery users may purchase equipment at auction by filing with the equipment division of W.P.B. at least ten days prior to the auction a PD-18 application to purchase any particular item and receiving the application back from W.P.B. properly authorized. This arrangement was announced on June 22.

Maintenance, Repair and Operating Supplies.—Records of M.R.O. supplies may be kept on the basis of supplies received rather than amounts ordered. W.P.B. announced on June 20.

Medical Equipment Simplified.—See page 124.

Oil Burner.—Oil burners used as part of commercial cooking and food and plate warming equipment were excluded by W.P.B. on July 10 from the definition of "oil burners" in L-182. The order had been previously amended on June 28 to provide that all orders for Class B oil burners should go to the Plumbing and Heating Division of W.P.B. Class B burners use No. 1, 2, 3 or 4 fuel oil. There are enough such burners to supply a two-year demand at present rates.

Penicillin.—This drug was placed under W.P.B. allocation on July 9 by Allocation Order M-338. A producer or distributor must file Form W.P.B.-2947 before the 25th of the month preceding the month of delivery to obtain authority for proposed deliveries. Hospital pharmacists are not considered suppliers for the purpose of this order.

Prosthetic Devices.—O.P.A. on June 24 authorized regional administrators to provide individual adjustments of ceiling prices for false teeth, artificial eyes and limbs and similar products where positive war-time shortage factors exist.

Rationing.—Special hospital regulations adopted July 5 are announced in the Food Service Section on page 106. In addition, O.P.A. on July 12 instructed local boards to make adjustments in the ration points of institutional users if their opening inventory last March included home canned foods. Seven points per pound credit can now be given such users for all home canned food reported last March. Hospitals should make application in writing to their local boards.

Any institutional user who received a supplemental allotment of a rationed food during the March-April allotment period or the May-June period must report the number of persons served and the dollar revenue for the specific period for which he received the increase, according to Amendment 30 to G.R.O.5, made effective on June 26.

Refrigeration.—Rebuilt or reconditioned parts or subassemblies for commercial refrigeration equipment were put under a ceiling price of 75 per cent of the price for new parts, by action of O.P.A. effective June 25.

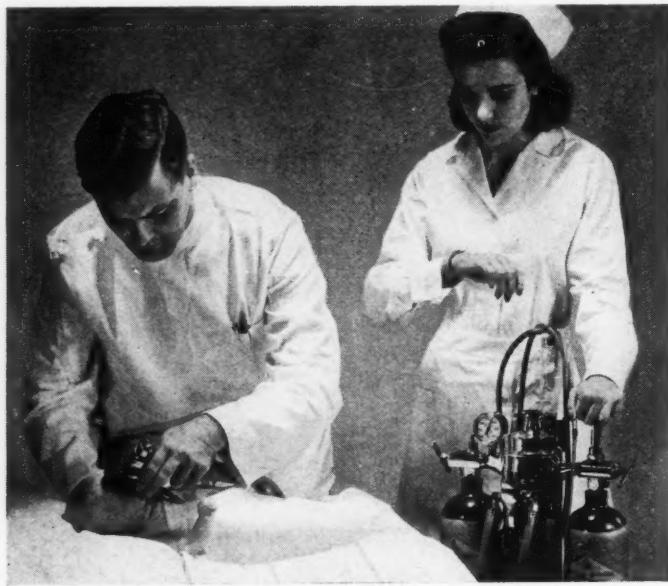
Sheets, Towels, Pillowcases.—A sufficient number of these items is available for civilian use if people buy only what they need. W.P.B. stated on June 30.

Sterilizer Equipment.—An increased variety of types and sizes of sterilizers was authorized by an amendment on July 6 to L-266. Additional sizes of pressure sterilizers of the cylindrical, rectangular and water pressure types, baby bottle sterilizers, nonpressure sterilizers and bedpan steamers were added. Restrictions on the use of critical materials were eased.

Tile.—Simplified shapes and patterns of tile were recommended to W.P.B. by its industry advisory committee. Tile production is now 20 per cent of normal and a shortage is expected this fall.

Used Typewriters.—Ceiling prices on sales and rentals of used typewriters were completely revised by O.P.A. on July 14.

Vacuum Cleaners.—Industrial vacuum cleaners cannot be made without accompanying orders rated AA-5 or higher or unless the applicant indicates a need for the machine justifying such a rating. W.P.B. ruled on July 6 in amending L-222.



The E & J Resuscitator For Effective Artificial Respiration In Surgery, Obstetrics, Pediatrics & Emergency

This automatic Resuscitator, Inhalator and Aspirator with its wide range of use throughout the hospital has established an outstanding record of successful resuscitation in desperate cases of Asphyxia. It can be used for Infants, Adults or Children and is absolutely safe and extremely simple to operate.

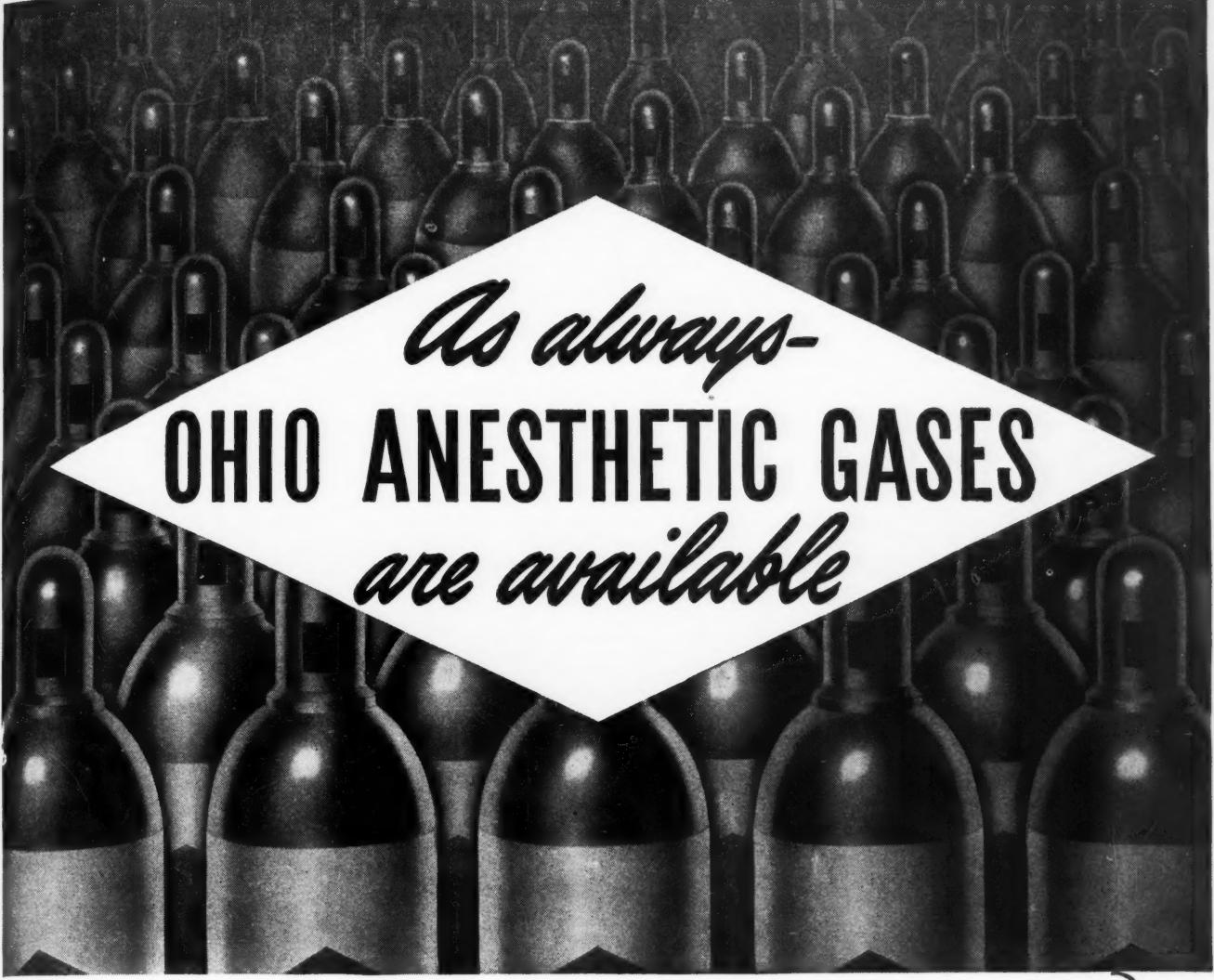
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War has curtailed production of many products requiring critical materials. But Ohio anesthesia gases are available as always. However, to make possible the prompt shipment of these gases, a continuous supply of cylinders is necessary.

New cylinders are unobtainable for the duration. Help yourself and others by not stocking gases beyond normal needs and by returning empty cylinders promptly.

* * * * *

Your gas machines are being called upon to carry a greater load than ever. We stand ready to help you conserve your anesthesia equipment for the increased use it receives these days. Any Ohio representative will gladly give you his help in maintaining your gas anesthesia and therapy apparatus in perfect condition by making minor repairs on the spot. Major repairs are made at one of our service stations.

To secure prompt service
on shipments of these gases:

- 1 Return all empty cylinders promptly.
- 2 Order more frequently.
- 3 Return extra cylinders which are in excess of your immediate requirements.



THE OHIO CHEMICAL & MFG. CO.

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1177 MARQUETTE STREET, CLEVELAND, OHIO

Branches in all Principal Cities

15 Hospitals Complete Formation of Affiliated Units, O.C.D. Announces

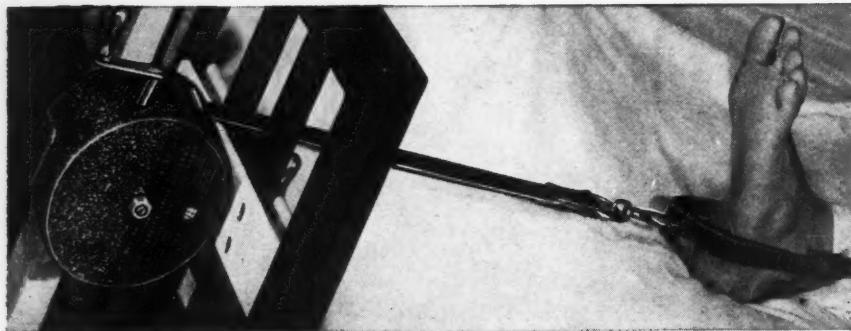
WASHINGTON, D. C.—The medical division of the Office of Civilian Defense announced June 22 that 48 hospitals and medical schools have substantially completed the formation of affiliated hospital units of civilian physicians under the program of the U. S. Office of Civilian Defense and the U. S. Public Health Service to provide supplementary staffs for emergency base hospitals and to assist the Army in extemporized hospitals in a serious military emergency.

Fifteen hospitals have completed units since the first list was announced April 15. The recent additions are: Delaware Hospital, Wilmington, Del.; Elizabeth General Hospital, Elizabeth, N. J.; Goddard Hospital, Brockton, Mass.; Greenville General Hospital, Greenville, S. C.; Hillman Hospital, Birmingham, Ala.; Macon Hospital, Macon, Ga.; Medical College of Virginia, Richmond; Methodist Hospital, Dallas, Tex.; Millard Fillmore Hospital, Buffalo, N. Y.; Mississippi Baptist Hospital, Jackson, Miss.; Mount Sinai Hospital, New York City; Queens General Hospital, Long Island, N. Y.; Rhode Island Hospital, Providence, R. I.; Santa Clara County Hospital, San Jose, Calif., and Waterbury Hospital, Waterbury, Conn.

As a result of the recent request by the Army for temporary assistance of the O.C.D.-U.S.P.H.S. affiliated hospital units for emergency service in extemporized Army hospitals in the event of a critical military need, invitations to form units have now been extended to institutions in interior states.

Up to July 15 a total of 254 institutions had been invited by the surgeon general to form units. Unit directors had been nominated by 194 hospitals, and of this number, 116 have taken their oaths for commissions in the U. S. Public Health Service. In addition, applications had been received from 863 members of units, of whom 412 had taken their oaths.

Simplifies Nursing Care in Traction Cases



The HERZMARK-ADAMS TRACTION REEL

The Herzmark-Adams power spring traction apparatus can be used for all types of traction where pulleys and weights are now used. This includes skin or pin traction, skull traction, overhead traction from a frame, as well as counter traction. A removable key adjusts the traction to up to twenty pounds. A scale shows the number of pounds used. The apparatus is easily attached to any position on the bed, using only the attachments supplied.

FEATURES . . .

1. No weights to handle. Traction up to 20 pounds set by the removable key. The apparatus is self-contained.
2. It provides constant traction since the weights are not bumped into and cannot become caught. Once the traction is adjusted and the key removed, visitors cannot change the adjustment.
3. Movement of the patient causes practically no variation in traction.
4. Easily attached with only the attachments supplied.
5. The apparatus is durably built . . . there is nothing to get out of order.

NOTE: The elimination of swinging weights makes this apparatus ideal for use on board ship, train, plane or car.

No. B-1000 Herzmark-Adams Traction Reel with two 12" horizontal bars and one 14" vertical extension bar.....\$34.50

Discounts for quantity.

Prices higher outside U. S. A.

CLAY-ADAMS CO INC.
44 EAST 23rd STREET, NEW YORK, N. Y.



V-D Control in Caribbean Area Discussed at Conference

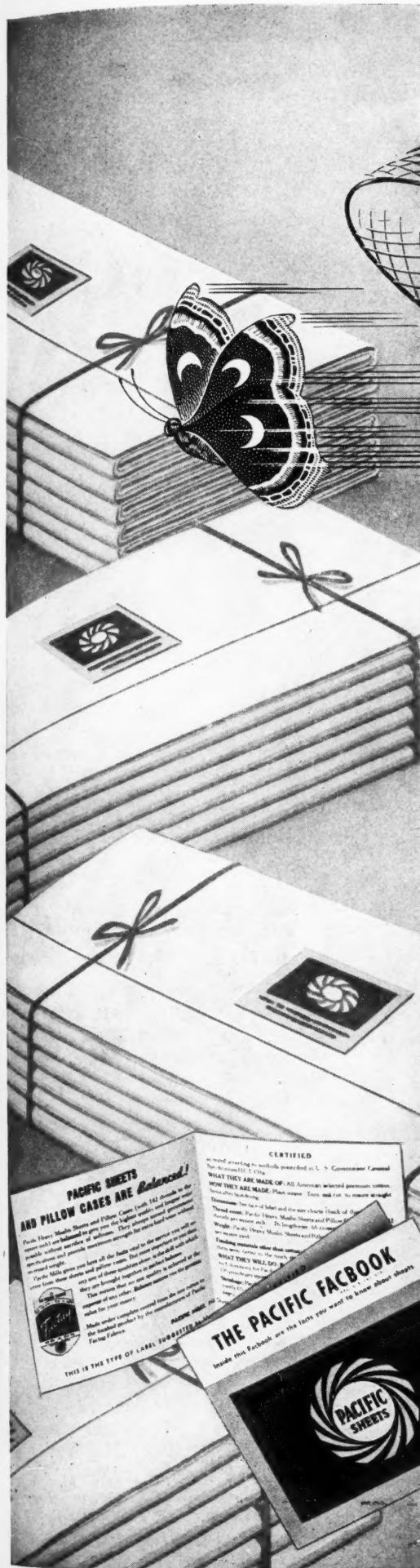
WASHINGTON, D. C.—A three day joint conference between members of the Interdepartmental Committee on Venereal Disease and representatives of the Anglo-American Caribbean Commission was held in Washington June 28-30. Representatives of the British Government participated in the conference as did also representatives from our own Army, Navy, Public Health Service, State Department, Office of Community War Services, Federal Works Agency, Rockefeller Foundation and other agencies.

With safeguarding the health and welfare of military personnel stationed in foreign localities as a principal consideration, officials at the conference emphasized the importance of a workable venereal disease control program in the Caribbean Area where the prevailing rate of such infections has always been high.

Discussion of the problem for the Caribbean Area as a whole included the planning of methods for expediting shipments of drugs and medicinal and laboratory supplies; utilizing the services of local resident physicians, and securing trained personnel for service in laboratories, hospitals and clinics.

Nurses' Salary Study Issued

When full maintenance is provided, small hospitals, as a rule, pay the highest salaries to nurses, it was revealed in a study of annual salaries and salary increases paid to general staff nurses published by the American Nurses' Association. The study covered 2000 hospitals and presents a comprehensive factual statement of the size and range of salaries with no attempt to interpret the findings.



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Looms for Bandage Cloth Frozen; Sale of Diaper Cloth Is Restricted

WASHINGTON, D. C.—Action to assure adequate supplies of bandage cloth for both military and civilian use was taken July 3 by W.P.B. Looms operating on constructions of cotton cloth suitable for bandages and other specified uses were frozen to these constructions.

Producers, converters and jobbers were ordered to restrict sales and deliveries of two constructions, 38½ inch 44/36 8.60 yard or 38½ inch 44/40 8.20 yard

print cloth, or pro rata widths, for the following uses: surgical bandages, cheese bandages (for wrapping cheese for military and civilian purposes), and to meet specific orders of the armed forces, Maritime Commission and War Shipping Administration.

Two other changes in existing controls over cotton production and distribution were effected with the amendment of Supplementary Limitation Order L-99a (cotton textile production). (1) It is made clear that finished as well as gray cloth is covered by prohibition against sales of 80 squares (39 inch 80/80 4.00 yard print cloth) except for orders bear-

ing AA-5 ratings or higher. The restriction also includes pro rata constructions. (2) Sales, deliveries or use of diapers and diaper cloth for industrial purposes are banned. The action was aimed primarily against the practice of using diaper cloth for industrial wiping cloths.

Air Force Doctors Assigned According to Their Specialties

WASHINGTON, D. C.—The Office of the Air Surgeon has placed in accordance with their professional specialties 98.8 per cent of all medical officers of the Army Air Forces who are qualified as specialists by the specialty boards or colleges of the medical profession, the War Department has announced.

Of the remaining 1.2 per cent, the large majority are officers who are assigned to administrative duty because of special ability in that field or are functioning as executive officers and commanding officers of hospital installations.

Emphasizing the importance of this careful assignment, Brig.-Gen. David N. W. Grant, the Air Surgeon, said: "The efficiency and quality of medical care available at the many Army Air Forces hospitals are due to the proper placement and selection of the hospital staffs. This not only ensures superior medical care to Air Forces personnel but also makes possible the most efficient medical practice with the greatest economy of manpower."

Start an architect on your hospital plans NOW



Question—Why plan when you can't build?

Answer—We Americans have made a promise to supply jobs to our men in the armed forces when they come home. Only with definite plans started now and completed before the war ends, can the promise be fulfilled quickly.

Question—Who's available to draw such plans now?

Answer—Numerous talented architects, specialists in hospital design, are immediately available.

Question—Why is full postwar employment in the Building Construction Industry of special importance to all loyal Americans?

Answer—The Building Industry, made up chiefly of hundreds of small firms, is America's No. 1 Industry. It must employ a large part of the postwar millions. You can help by getting plans started now.

Question—What can I do to get the drawing of plans under way?

Answer—Call the need for planning now, to your hospital board and hospital officials. Urge them to use available facilities of architects, engineers, contractors, builders, realtors, etc., for forward planning now.

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Haskell & Considine, Architects;
Lowman Construction Co., Contractors.

Fenestra production facilities are now working all-out for war. Fenestra Engineers are now planning new and better—

WINDOWS · DOORS · ROOF DECK
FLOOR DECK · METAL SIDING
and other building products

Fenestra POSTWAR HOSPITAL Windows

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HOSPITAL



THE UGLY DUCKLING FELT OUT OF PLACE

The ugly duckling was a gosling and didn't match the other members of the family; and so the appearance of the entire group was spoiled.

● The management of hospitals, aware of the importance of appearance, plan their kitchen and clinical ware with an eye to uniformity. That is why so many of the leading hospitals and institutions in the United States insist upon genuine Vollrath Ware. They know that the completeness of the Vollrath line is their assurance of obtaining a completely-matched set . . . They know, too, that genuine Vollrath Ware is built for long years of service. Its craftsman-created quality is unmatched. Since 1874—sixty-nine years ago—Vollrath has maintained its unrivaled leadership. We're proud of its heritage.

The **BUY U. S. WAR BONDS**
Vollrath Co.

Genuine Vollrath Ware
Bears This Label

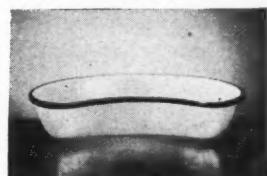


ESTABLISHED 1874

SHEBOYGAN • WISCONSIN



Vollrath Nu-Steel Liquid Cleaner



Porcelain Enameled Pus Basin



Stainless Steel Male Urinal

A.H.A. War Conference Will Feature Manpower, Finance, Postwar Plans

Important questions of hospital finance, materials, manpower and postwar planning will highlight the second war conference of the American Hospital Association to open in Buffalo on Monday noon, September 13.

The afternoons will be devoted to large general sessions in which federal officials responsible for various governmental programs will appear. Monday will cover materials, conservation, simplification and rationing.

Tuesday afternoon will be devoted to manpower shortages and remedies and to the work of volunteers. On Wednesday afternoon there will be a discussion of hospital finances with a forecast of the general economic situation, discussion of voluntary and governmental capital financing and voluntary and governmental current financing.

The important subject of postwar hospital planning will occupy the Thursday afternoon meeting with discussion of public health aspects, physical plant, nursing, government facilities and rehabilitation of wounded.

Tuesday, Wednesday and Thursday

mornings will be devoted to meetings of the 16 sections, with six meetings each morning.

Monday evening will be the president's session. Tuesday evening will have a special program for trustees, employes and volunteer workers. Wednesday is for the hospital activities of the United Nations and Thursday evening will bring the annual banquet.

The usual general roundtable will occur on Friday morning.

The house of delegates will meet on Sunday morning at 9:30 and again on Tuesday evening and Wednesday afternoon.

Blue Cross plans will have meetings on Monday, Tuesday and Wednesday.

ALL THIS FRESH GARDEN GOODNESS in every glass of V-8 Vegetable Juices

★ Just thinking about vegetables, and how they grow, makes one hungry — especially one convalescing within the cloistered walls of hospitals. The appetite appeal of V-8 — its fragrance, its delicious flavor, its gay, ruddy hue — all step up interest in food. And V-8, as millions know, is simply the combined juices of a whole garden of vegetables — carrots, lettuce, celery, tomatoes, spinach, beets, parsley, and watercress — blended and proportioned to produce a most delectable taste. V-8 is pasteurized (not cooked) and contains Vitamins A, B1 and C, and the minerals, calcium and iron. Dietitians who have used V-8 continue to do so!



EASY TO SERVE

For use in hospitals, schools and institutions V-8 has the added advantage of being instantly ready to serve as a satisfying beverage between meals or as a before-meal appetizer. Heated it makes a stimulating vegetable cup served with croutons or crackers.

HANDY RECIPE PACKET FREE

V-8 used as an ingredient in many new dishes imparts a delightfully novel and refreshing tang for appetites at low ebb. Send for a handy packet of quantity recipes, free, to Standard Brands Incorporated, Loudon Division, Terre Haute, Indiana.



Barnard Will Address A.C.H.A.

Chester I. Barnard, president of the New Jersey Bell Telephone Co., president of the United Service Organizations, author of "The Executive Function" and lecturer at leading American universities, will be the banquet speaker for the American College of Hospital Administrators on Sunday evening September 12, according to an announcement on July 16 by Dean Conley, executive secretary.

The college will hold its convocation at 2:30 on Sunday afternoon and its banquet at 7 that evening. There will be a general business session followed by a general educational session the following morning.

"No Interference," F.W.A. Promises

WASHINGTON, D. C.—"We will continue to observe meticulously the provisions of the Lanham Act prohibiting federal interference in the operation of schools and hospitals," announced Maj.-Gen. Philip B. Fleming, administrator of the Federal Works Agency, on July 14. A new \$50,000,000 appropriation under the Lanham Act was recently signed by President Roosevelt. "All our formal offers to local bodies of contributions for child care, as well as funds for schools and hospitals, will include special provisions enunciating this policy and making it clear that nothing in the offers should be construed as affecting in any way the operation or administration of the school or hospital facilities," he added.

A.P.H.A. to Study Religious Work

The annual convention of the American Protestant Hospital Association will be held at the Hotel Statler in Buffalo, N. Y., Saturday, September 11. The entire afternoon session will be devoted to the study of religious work in the Protestant hospitals.



Up in the air? Most hospital superintendents and pur-

chasing agents are frequently lost in the clouds of a wartime economy these days. No one knows all the answers. But you CAN get helpful answers to many of your pressing supplies questions and problems by *asking Will Ross.* ★ It is our business to know who is making "what"; . . . where and when merchandise is *available* and whether or not it is especially adapted to hospital service. **ASK WILL ROSS.**

18 SPECIALIZED DEPARTMENTS

Surgical Dressings	Garments
Instruments	Traywares
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Needles • Syringes	Lamps
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Laboratory Glassware	Furniture
Surgical Glassware	Equipment for Surgery
Enamelware	and Operating Room
Linens	Smallwares
	and Specialties

WILL ROSS, Inc.

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WISCONSIN



Quality Hospital Supplies

Canadian Hospitals Present Six Point Wage and Salary Program

Canadian hospitals have prepared a six point wage and salary program which has been presented to the National War Labour Board of Canada. The six points are:

1. Wage levels should be set for the various classes of employees found in both hospitals and outside industry.
2. Where a hospital is paying such approved wages, National Selective Service should see to it that such hospital is

ensured sufficient employees of the various classifications to staff this recognized essential service adequately.

3. To permit hospitals to meet standard wage requirements, they should be subsidized by the Dominion Government.

4. Hospital strikes of any type should be declared illegal.

5. (a) All employees should be frozen to the type of their employment or industry. (b) It should be essential for those seeking employment, even where only one employee is employed, for example, household domestics, to have in their possession a permit of employment.

6. (a) Chronic absenteeism not due to justifiable reasons should be considered as an offense punishable at law by fine and/or imprisonment. (b) Income tax should be deductible on a daily basis.

Two Hospitals Conclude Successful Fund Campaigns

Two hospital fund-raising projects were brought to successful conclusions during July. The \$1,000,000 campaign by Ketchum, Inc. for the Women's Hospital of Flint, Mich., was oversubscribed to a total of \$1,113,387. This will permit the construction of a 160 bed hospital to replace the present overcrowded 40 bed institution. Funds will be invested in government bonds until the building program can be started.

In Hartford, Conn., a campaign for a goal described by Will, Folsom and Smith, campaign managers, as "the largest fund ever sought by public subscription for the enlargement and improvement of one community hospital" was virtually assured of success. This is for \$5,000,000 for the Hartford Hospital.

Only \$155,000 remained to be obtained on July 9 and campaign leaders pledged that the whole fund would be completed, "probably by the end of July." At the victory dinner when the fund was 97 per cent subscribed, it was reported that 147 corporations had subscribed \$1,800,000 and 28,314 employees in industrial plants had subscribed \$169,426. The remainder came from individuals and families.

THE Luck BONE SAW

ECONOMIZES TIME IN ORTHOPEDIC SURGERY

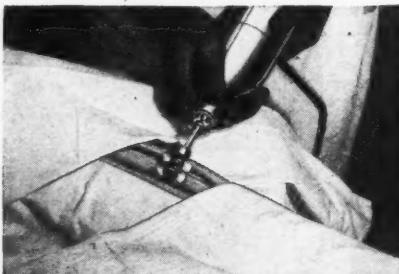
The necessity for strict economy of time, due to personnel depletion, is something every civilian surgeon recognizes today. The Luck motor-driven bone drill and saw has proved clinically that it helps to save time and labor.

There are two exclusive features. The complete motor unit and cord can be sterilized in autoclave. And the motor provides a high speed of 13,000 R.P.M. at the small end, while gearing reduces speed, 6 to 1, at the other end, to which the Jacobs Chuck is attached.

The high speed makes possible the use of very small diameter slotting burrs. The lower speed is ideal for inserting Steinman Pins and Kirschner Wires as well as sawing the bone. Variable speed is obtained by a foot controlled rheostat.



Used with slotting burr in making transverse end cuts during removal of bone grafts, after longitudinal cuts have been made with circular saws.



Used with twin circular saws. They rotate up to approximately 1500 revolutions per minute. Have great power. Do not jam or burn the bone. Second blade readily removed if only single blade is desired.



← The Luck Bone Saw in fitted case with complete equipment.

WRITE Zimmer today for further information, or complete catalog.

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MANUFACTURING CO., WARSAW, IND.

Leading the Way—

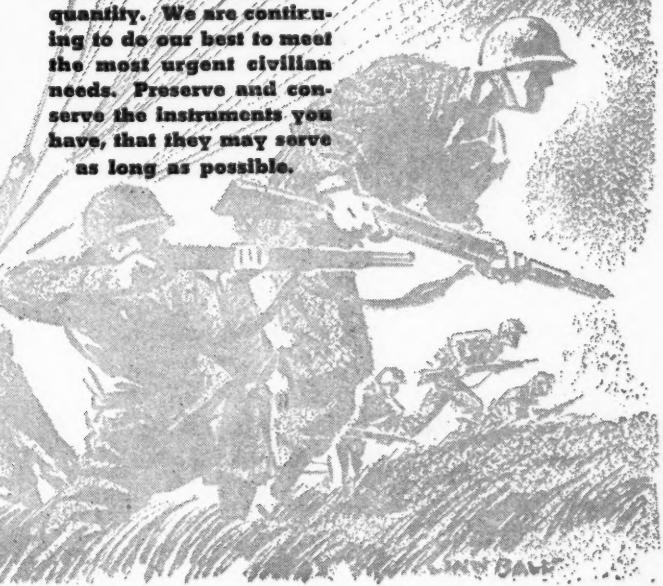
TIMED to the second and protected by our powerful air fleet, America's intrepid Paratroopers lead the way in our invasion of Europe. No less gallant are the medical troops who follow close behind—on the job day and night, wherever and whenever needed. The nation pays tribute to the skill and bravery of these fearless soldiers of mercy. Modern science has provided our Military Surgeons with superb equipment. Sklar surgical instruments rank high among such equipment, serving flawlessly on scores of battle fronts all over the world just as they have served American surgeons at home for more than fifty years.



J. SKLAR MANUFACTURING COMPANY
LONG ISLAND CITY, N. Y.



Instruments available for civilian use are limited in quantity. We are continuing to do our best to meet the most urgent civilian needs. Preserve and conserve the instruments you have, that they may serve as long as possible.



Maternity and Infant Care for Wives of Service Men Assured

WASHINGTON, D. C.—Maternity care for wives of men of certain grades in military service and medical and nursing care for their babies were assured by a Congressional appropriation effective July 1 for this fiscal year of \$4,400,000. The bill was signed by the President March 18, 1943.

Under this plan a pregnant woman may receive prenatal care from a qualified doctor of medicine of her own

choice in a clinic or at his office. At childbirth, whether she stays at home or goes to a hospital, she and her baby may receive medical and nursing care. Complete maternity care may be provided, including a final physical examination six weeks after the baby is born, and the baby may receive medical care during the first year of life.

Thirty-seven states, the District of Columbia and Hawaii have received approval by the Children's Bureau of programs designed to carry out this plan, according to an announcement July 2 by Secretary of Labor Perkins. Under the maternity and infant care program,

16,000 cases were handled in June and it was anticipated that some 19,000 mothers would receive care through this plan in July, said an official at the Children's Bureau on July 10.

Gain in Blue Cross Members Highest in History of Plans

The largest net enrollment gains in Blue Cross history for corresponding periods were recorded both for the first half of 1943 and for the second quarter of this year. The former was 1,280,000 and the latter, 727,000.

The total enrollment on July 1 was 11,739,000 not counting the 500,000 contracts held in abeyance while subscribers are in the armed forces. Three-fifths of the net gain was in family dependents.

At present, subscribers constitute 46 per cent of the total number enrolled.

Colorado Hospital Service passed the quota set for it for the year 1943 by the approval committee. Northwest Hospital Service of Oregon passed its year's quota in the first quarter. Three other plans nearly reached their year's quotas.

The plans with net gains of more than 40,000 for the quarter are: Detroit, 117,700; Newark, 83,100; Boston, 76,700; Pittsburgh, 67,400; Toronto, 67,000; Cincinnati, 64,300; Chicago, 59,000; Philadelphia, 46,700; New York City, 41,400, and Cleveland, 41,200.

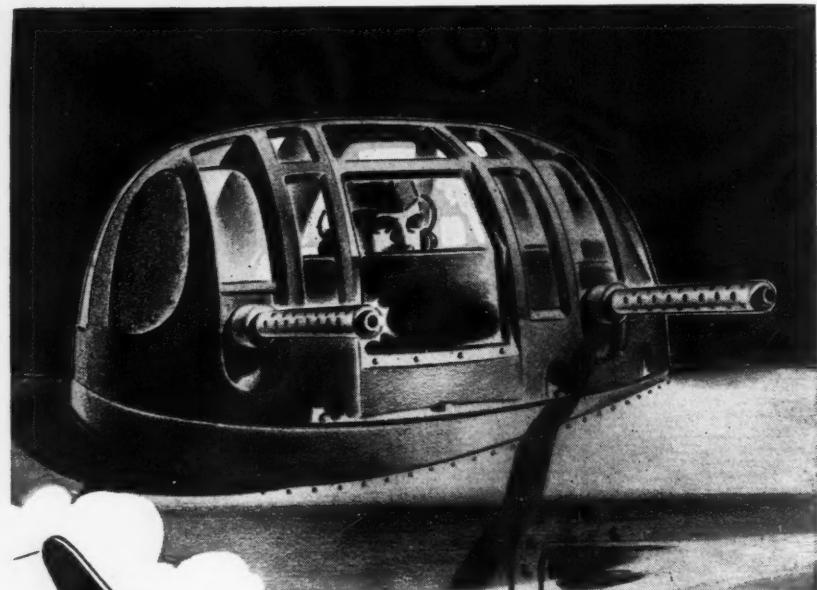
Army-Navy "E" Awards

Several additional industrial plants serving hospitals have won the Army-Navy production award for outstanding performance in war production during the period from June 15 to July 15. They are as follows:

Becton, Dickinson and Company, Rutherford, N. J.; Cannon Electric Development Company, Los Angeles; Corning Glass Works, Charleroi Plant, Charleroi, Pa.; Sloan Valve Company, Chicago; Bastian-Blessing Company, Chicago; Orange Screen Company, Maplewood, N. J.; Taylor Bedding Manufacturing Company, Taylor, Tex.; Taylor Instrument Companies, Rochester, N. Y.; the Griswoldville, Mass., Slatesville, R. I., and Walpole, Mass., plants of the Kendall Company, and three plants of Pepperell Manufacturing Company, i.e. Fall River, Mass., Lindale, Ga., and Opelika, Ala.

C.H.A. to Meet in Ottawa

The biennial meeting of the Canadian Hospital Council will be held at the Chateau Laurier in Ottawa, Thursday and Friday, September 9 and 10, just preceding the convention of the American Hospital Association and related organizations. Practically the entire Canadian meeting will be taken up with current war-time problems.



Find the
U. S. SLICER
IN THIS PICTURE

IT'S there all right, but in another form. The new U. S. Slicer you would be getting in peacetime is now converted to some of the most important parts of gun turret construction. Not every manufacturer could build these intricate parts so that they would be quickly interchangeable. Fortunate we were to have the facilities and the trained craftsmen to produce them in the quantities needed by our Government. Undreamed-of strength and precision have been attained...What does this mean to the U.S. Slicer of the future? Simply this: It will be better and finer than ever before!

Get the FEEL of doing YOUR SHARE! Buy more War Bonds





HOW BIG IS A BLOOD BANK?

• That question may seem fatuous, but actually, "to operate a successful blood bank, a hospital must do at least 750 or 1,000 transfusions a year. Otherwise, it alternates between an excessive supply of blood, which goes to waste, and shortage."¹ "In most general hospitals of 400-bed capacity or smaller . . . the volume of transfusion work is not great enough to justify the establishment of a blood bank."²

• *'Lyovac' Normal Human Plasma*, however, can be kept safely without refrigeration wherever treatment of shock may be required . . . in accident room or ambulances, operating room or office, in first-aid stations and mobile disaster units. Reserves may be as large or as small as

necessary. *Stability* is secured by rapid freezing followed by dehydration from the frozen state and storage under vacuum in flame-sealed glass vials. The desiccated plasma is simply restored by addition of sterile, distilled water. Hypertonic (concentrated) plasma can be easily prepared.

Each 250-cc. unit provides approximately as much osmotically active protein as 500 cc. of whole blood, and—since 'Lyovac' Normal Human Plasma represents pooled material from many bleedings—it may be administered at once without typing or cross-matching.

Accepted by the Council on Pharmacy and Chemistry of the American Medical Association. . . . Sharp & Dohme, Philadelphia, Pa.

1. N. Y. State J. Med., 42:1145, 1942. 2. Modern Hospital, 58:100, 1942.

'LYOVAC' NORMAL HUMAN PLASMA

Noninflammable Anesthetics Produced by Adding Helium

WASHINGTON, D. C.—Laboratory and clinical investigations at St. Francis and other hospitals in the Pittsburgh district by the U. S. Bureau of Mines and the University of Pittsburgh School of Medicine have proved "rather conclusively that satisfactory noninflammable anesthetic mixtures can be obtained by the addition of helium in sufficient amount to cyclopropane and oxygen and to cyclopropane, ether and oxygen mixtures."

This was revealed with the publication on July 15 of a technical paper "Explor-

sion Hazards of Combustible Anesthetics" by G. W. Jones, R. E. Kennedy and G. J. Thomas.

The addition of helium will prevent explosions and fires which, in some instances, have caused fatal accidents in operating rooms, Dr. R. R. Sayers, director of the Bureau of Mines, stated. Such explosions and fires have not been numerous, the report said, but they are a real danger.

Helium, which in 1915 cost \$2500 a cubic foot is now being produced by the Bureau of Mines at a cost of less than 2 cents a cubic foot and doubtless will be available in large quantities for civil-

ian uses after the close of the war.

The major advantages of using helium to reduce the oxygen content to a safe range are that it reduces the density of the gases, making them easier for the patient to breathe, and its resistance to chemical change, nonreactivity with other substances and low solubility in water and body fluids enable it to be breathed by patients with a minimum physiological effect on the body. Furthermore, its high conductive power for heat and electricity is of marked advantage where static charges may be present.

X-Ray Film Shortage May Be Relieved, W.P.B. Official Says

WASHINGTON, D. C.—The scarcity of x-ray film may be considerably relieved by the third quarter production which is considerably higher than in previous quarters, an official of the motion picture and general photographic section of W.P.B. stated on July 10.

During the recent period of shortage the manufacturers have operated an informal rationing system for x-ray film designed for medical uses. This latter film, unlike that for industrial x-ray uses, has not been given priority ratings. Instead, the available quantity has been distributed upon dealers' orders in proportion to the amount these dealers purchased during the last three months of 1942.

One of the manufacturers has written a letter to roentgenologists asking their assistance in conserving films and suggesting six steps that will help to accomplish this purpose.

Town Loses Its Hospital

The 15,000 inhabitants of Mount Vernon, Ill., will be without a hospital when the town's only institution closes August 1 for the duration of the war. According to Dr. S. A. Thompson, 75 year old owner of the hospital, a shortage of nurses and other help, in addition to rising costs, made the closing necessary. However, Doctor Thompson asserted, he plans to continue with his practice and to reopen the hospital after the war. The nearest hospital to Mount Vernon is at Salem 22 miles away.

Strecker to Be Consultant

Announcement has been made of the appointment of Dr. Edward A. Strecker of Philadelphia, president of the American Psychiatric Association, as special consultant to the Secretary of War for the Army air forces. Serving as a civilian adviser, Doctor Strecker will be on call at all times by the War Department to advise on all questions relating to psychiatry in the air forces.

PAGING 4 DOCTORS

—WITHOUT SOUND

—WITHOUT DISTURBING ANY PATIENTS

Cannon Hospital Signal Systems include complete equipment for paging doctors and hospital personnel. By means of a numbered dial, four call numbers may be set up at one time by the operator. Each of the four numbers will flash alternately on a lamp annunciator automatically until cancelled by the operator. This system has a capacity of 999 call numbers.

A chime may be incorporated with this equipment, but by correct placement of the annunciators in corridors or wards, paging can be done efficiently without the use of an audible signal, thereby relieving patients of this disturbance.

Cannon Hospital Signal Systems include a complete line of . . . Bedside Calling Stations • Nurses' Call Annunciators • Supervisory Stations • Corridor Pilot Lights • Doctors' Paging Systems • Aisle Lights • In and Out Registers • Explosion and Vapor-proof Switches • Elapsed Time Recorders.

WRITE FOR LATEST BULLETIN. Address Dept. A-124, Cannon Electric Development Company, Los Angeles 31, California.

CANNON ELECTRIC

CANNON ELECTRIC DEVELOPMENT COMPANY, LOS ANGELES 31, CALIFORNIA





In a sheltered spot a thousand yards or so behind the front stands an armored half-track. Surrounded by a ward tent, this is a battalion "hospital," complete with operating room, where a doctor must be prepared to do anything from dressing a bullet wound to performing brain surgery.

At such aid-stations on battlefields... in hot sick bays on the perilous sea—wherever our Armed Forces are found, medical men are "in attendance," saving the lives of fighting men, restoring them in months or days where once it would have required years. In no other war have so many

names been so proudly added to Military Medicine's Roll of Honor.

Today, of course, because of plasma, sulfa drugs, advances in surgery and other scientific developments, the physician is able to perform merciful operations that would have astonished his predecessor of 1917-18. But much of the credit must go to the modern doctor's knowledge and skill, and to those traditional medical aids which are ever at his side. Among the most useful of these is U.S.I. Pure Alcohol.

U. S. INDUSTRIAL CHEMICALS, INC.

60 EAST 42nd STREET • NEW YORK, 17, N.Y.
BRANCHES IN ALL PRINCIPAL CITIES

Physician in Attendance



U.S.I. Pure Alcohol is, of course, still available for hospital use on the home front. Check your requirements for alcohol with this convenient list of 21 major hospital applications... and specify U.S.I. Pure Alcohol for every use.



CHECK LIST

21 IMPORTANT HOSPITAL USES FOR ALCOHOL

- Compounding Prescriptions
- Cresol Compounds Dilution
- Dehydration of Pathological Sections
- Drug Tincture & Extract Preparations
- Duodenal Drainage
- Floor Dressings and Packs
- Gastric Analysis
- Hand Rinsing After Scrub-up
- Hypodermic Injections
- Massage and Sponge
- Pharmaceutical Preparations
- Pharmacy Solvent for Vegetable Drugs
- Preserving Specimens
- Protein Precipitant
- Spirit Lamps
- Stains and Reagents
- Sterilizing Instruments
- Sterilizing Skin
- Surgical Soap Preparation
- Sutures Sterile Solution
- Therapeutic Nerve Block



PURE ALCOHOL

Illinois Mental Hospitals Both Praised and Criticized

State mental hospitals of Illinois came in for praise and criticism last month from widely different sources. The praise came from Homer Folks of the State Charities Aid Association of New York who pointed out that efforts to reduce the population of the state hospitals of Illinois were showing results that are strikingly similar to those in New York. "The two states, working quite independently of each other, undertook very similar methods, discovered similar opportunities, devised similar

remedies and obtained very similar results."

A more liberal policy of release and more intensive study of patients were undertaken and too frequent and too easy recourse to commitment was opposed.

During July, however, serious reflections on the administration of the Illinois state hospitals were contained in revelations made by the *Chicago Sun* of political activities in the hospitals. William Knoch, a former furniture salesman, according to the *Sun*, was appointed by Gov. Dwight F. Green to run the business and personnel aspects of the hos-

pitals. The *Sun* charged, among other things, that Knoch had let contracts for pest extermination to favored companies at \$2000 per month that formerly cost the state \$63 per month and that state-owned medical equipment and trained nurses and attendants were sent to the homes of Republican politicians in Union County for the private treatment of the politicians' relatives.

Rodney H. Brandon, director of the state welfare department, who is nominally in charge of the hospitals but is at present apparently not in the favor of the governor, announced that he would make a complete investigation.

Quiet is doubly important in today's War-Busy hospitals!

UNDER the increased tempo of today, the need for acoustical materials in modern hospitals has become most acute. Fewer doctors and nurses...smaller staffs...more patients...everyone under war tension means that noises once considered "normal" are being magnified into disturbing proportions.

You can solve the noise problem in your corridors, diet kitchens, util-

ity rooms and other noise centers as many other hospitals have done...with Johns-Manville Acoustical Materials. They are attractive, sanitary, easy to clean, can be applied in new or existing buildings economically and with little disturbance.

Brochure AC-26A will give you full details. Send for it today. Write Johns-Manville, 22 E. 40th Street, New York 16, N. Y.



JOHNS-MANVILLE
Pioneers in Sound Control

J-M ACOUSTICAL MATERIALS AND J-M ASPHALT TILE FLOORS ARE HELPING HOSPITALS MEET WARTIME CONDITIONS THROUGHOUT THE COUNTRY

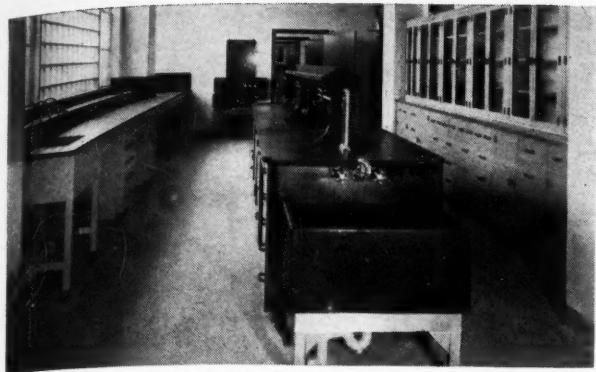


Coming Meetings

- Aug. 30-Sept. 10—A.H.A. Institute for Hospital Administrators, Knickerbocker Hotel, Chicago.
Sept. 8-11—American Congress of Physical Therapy, Palmer House, Chicago.
Sept. 9-10—Canadian Hospital Council, Chateau Laurier, Ottawa, Ont.
Sept. 11-12—American Protestant Hospital Association, Hotel Statler, Buffalo, N. Y.
Sept. 12-13—American College of Hospital Administrators, Hotel Statler, Buffalo, N. Y.
Sept. 13-17—American Hospital Association, Hotel Statler, Buffalo, N. Y.
Oct. 12-14—American Public Health Association, New York City.

1944

March 15-17—New England Hospital Assembly, Hotel Statler, Boston.



Grade 25 Alberene Stone Table Tops, Shelving and Sinks;
U. S. Veterans Hospital, Bronx, New York

Durable, Non-Critical Alberene Stone Laboratory Equipment is readily available

In selecting Alberene Stone for table tops, fume hoods, sinks, tanks and shelving, hospitals choose the material whose durability and lasting economy have been demonstrated in the country's leading laboratories for more than 50 years.

Shipments can be made promptly because Alberene is not a critical material and supplies and mill facilities are ample.

Typical recent installations:

Alleghany General Hospital, Pittsburgh, Pa.
U. S. Navy Medical Center, Bethesda, Md.
Psychiatric Hospital, Chicago, Ill.
Jersey City Medical Center, Jersey City, N. J.
Riverside Hospital, North Brother Island, New York
St. Raphael Hospital, New Haven, Conn.
Medical College of Virginia, Richmond, Va.

• • •

Our engineers are experienced in designing, reassembling and installing laboratories of every type. Call on us to do the complete job. Please address Alberene Stone Corporation of Virginia, 419 Fourth Avenue, New York 16, N. Y. Quarries and Mills at Schuyler, Va. Sales offices in principal cities.

ALBERENE STONE LABORATORY EQUIPMENT

All Hygeia Advertising in National Magazines
brings this important message to 17,000,000 families:



SIX REASONS WHY YOU CAN SAFELY RECOMMEND THE HYGEIA BOTTLE AND NIPPLE:

- 1 Wide mouth and rounded interior corners make bottle easy to clean and leave no crevices for dirt which breeds germs.
- 2 Famous Hygeia breast-shaped nipple has patented air vent which tends to maintain steady flow of milk, helping to prevent "wind-sucking."
- 3 Sanitary tab makes nipple easy to apply without touching sterilized surface with fingers.
- 4 Improved tapered shape makes it easier for baby to hold bottle and get last drop of formula.

5 Measuring scale applied in color makes it easy to observe amount of formula.

6 Wide base makes for safer handling in filling and attaching nipple.

Hygeia Nursing Bottle Company, Inc.
Buffalo, N. Y.



**HYGEIA NURSING BOTTLE
AND NIPPLE**
Safer because easier to clean

New Librarian for A.H.A. Bacon Library Chosen

Helen B. Pruitt, president of the Minnesota Hospital and Medical Library Association, has been appointed librarian of the Bacon Library of the American Hospital Association by George P. Bugbee, executive secretary. She succeeds Janet M. Green who retired from the library on January 1. Miss Pruitt expects to assume her new duties on August 15.

Miss Pruitt is a graduate of the University of Chicago and has a certificate in hospital and medical library service from the University of Minnesota. Since

March 1941 she has been librarian of the Glen Lake Sanatorium, Oak Terrace, Minn.

A gift of \$100 to the Bacon Library from the New England Hospital Assembly was announced last month. This is the second such gift from the assembly.

Demand for Geared Motors Threatens to Exceed Supply

WASHINGTON, D. C.—Productive capacity for small motors is threatened unless claimant agencies place their

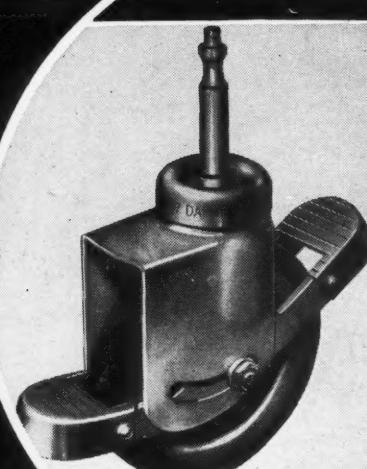
orders sufficiently far ahead to enable the industry to obtain its material at the proper time, W.P.B. was told by the Fractional Horsepower Motor Industry Advisory Committee at a recent meeting, according to an announcement on June 30. An increasing demand for geared electric motors threatens to be in excess of present known requirements.

The problem of maintaining appliances and other necessary equipment was discussed at length. It was pointed out that at present a great many small electric motors are not being repaired in sufficient time to keep necessary equipment running. The need for releasing parts to repair agencies so that their work can be accelerated was emphasized.

Motor manufacturers, it was reported, were offering to help the repair shops in repairing motors by using mass production methods.

DARNELL

**SAVE TIME . . .
SAVE FLOORS . . .
SAVE EQUIPMENT . . .**



CASTERS

**Precision-made Darnell
Casters with the DOUBLE
BALL-BEARING SWIVEL
assure a long life of effi-
cient, economical service**

DARNELL CORP. LTD., 60 WALKER ST., NEW YORK, N.Y.
LONG BEACH, CALIFORNIA, 36 N. CLINTON, CHICAGO, ILL.

Ask for New 1942 Page
DARNELL MANUAL

Pool Opened at Levi Hospital

An 11 year old poliomyelitis victim on June 27 christened the physical therapy pool in the new bath house at Leo N. Levi Hospital, Hot Springs, Ark. Named for Congressman W. F. Norrell who was instrumental in obtaining priorities for its construction, the pool is 75 feet long by 40 feet wide and is equipped with massage tables, bicycles and other apparatus for underwater treatment of infantile paralysis. Regina N. Kaplan, superintendent of the hospital, is convinced of the healing properties of the radio-active Hot Springs waters for all forms of paralysis and allied ailments and plans to invite heads of institutions for crippled children to send to her hospital two children who have not responded to treatment.

California Amends Nursing Law

Assembly Bill 326 amending Section 2727 of the California Business and Professions Code has been passed by the California state legislature and signed by the governor. The amendment authorizes the rendition of nursing services by unlicensed persons during a national emergency. The word "emergency" has been clarified to mean "an emergency arising out of war or during an epidemic or other public disaster." Registered nurses can now practice in California without state registration.

Association Forms Purchasing Group

The Maryland-District of Columbia Hospital Association has formed a purchasing section which plans to meet each month to discuss current purchasing problems. The first meeting was held July 20 at the Emerson Hotel, Baltimore, under the chairmanship of Ned E. Johnson of Johns Hopkins Hospital.



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Relief Committee Marks Third Year

Shipments of medical and surgical supplies valued at \$59,000 have been donated during the last six months to the U. S. Navy, Coast Guard, the armed forces of our allies and to welfare groups here and abroad by the Medical and Surgical Relief Committee. Marking the third anniversary of the founding of the organization, Mrs. Huttleston Rogers, executive chairman, announced that the total value of shipments since the committee was launched was \$551,699.24. French forces in North Africa and "Little Norway" in Canada received most of the foreign gifts for the last half year.

Infantile Paralysis Study

Unit Set Up at Minnesota

A special unit to study exactly what happens in the human body when poliomyelitis strikes and the methods of treating it is being set up at the University of Minnesota, it has been announced. For this program, the foundation has approved a five year grant of \$175,000 to the University of Minnesota for the period July 1, 1943, to June 30, 1948.

Building space and basic laboratory facilities are already available at the university. The unit will be under the general direction of a committee com-

posed of members of the departments of physiology, neuropsychiatry and pediatrics in the medical school of the university.

NAMES IN THE NEWS

Administrators

Rev. Herman L. Fritschel, D.D., after forty years of service as administrator of Milwaukee Hospital (Passavant), Milwaukee, has asked to be relieved of most of his administrative duties. In accordance with his request, the board of trustees has called **Rev. William G. Sodt, D.D.**, of Columbus, Ohio, to serve after September 1.

Harvey H. Weiss, superintendent of Memorial Hospital, Cumberland, Md., has been appointed superintendent of Sinai Hospital, Baltimore, succeeding **Sidney Bergman**, now superintendent of Montefiore Hospital, Pittsburgh.

Mrs. Charlotte Lawson, superintendent of Rutherford Hospital, Murfreesboro, Tenn., is now serving as a reserve nurse in the Red Cross Nursing Corps.

Florence M. Spicer, R.N., superintendent of the Memorial Hospital of William F. and Gertrude F. Jones, Wellsville, N. Y., has resigned after twenty-two years of service.

J. Thomas Lindberg has been selected as superintendent for Green County Memorial Hospital, Waynesburg, Pa., to succeed **Kenneth R. Gordon**, now in the armed services. Previously, Mr. Lindberg was the manager of a wholesale physicians' supply house in Waynesburg.

Daniel W. Hartman has been named superintendent of Williamsport Hospital, Williamsport, Pa., succeeding **Anna C. McKeague**, who died recently following a long illness. Formerly, Mr. Hartman was in charge of welfare work for Lycoming County Institutional District in the state and was superintendent of Lycoming County Home and Hospital.

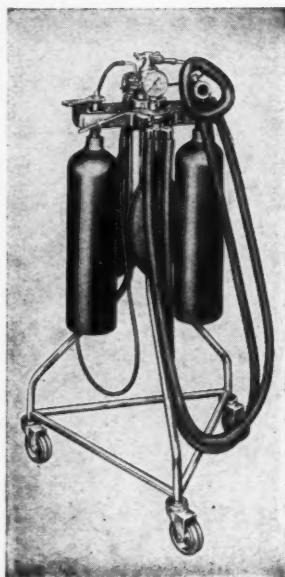
Anna Grace Williams, R.N., formerly superintendent of G. N. Wilcox Memorial Hospital, Lihue, Kauai, T. H., has been appointed superintendent of University Hospitals, Columbia, Mo.

Charles O. Auslander has been appointed assistant director of Michael Reese Hospital, Chicago. Mr. Auslander was formerly purchasing agent for the institution.

William Dawson, formerly with Sinai Hospital, Baltimore, has been appointed superintendent of South Baltimore General Hospital. He succeeds **E. Reid Caddy**, now at St. John's Hospital, Brooklyn, N. Y.

Dr. Cornelius P. Rhoads, director of Memorial Hospital for the Treatment of Cancer and Allied Diseases, New York

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City, has been given a leave of absence to become chief of the medical division of the Chemical Warfare Service of the U. S. Army, with the rank of colonel. Dr. Fred W. Stewart, pathologist at the hospital, has been appointed acting director with Dr. Howard C. Taylor Jr. as assistant.

Dr. J. E. Offner, superintendent of Weston State Hospital, Weston, W. Va., succeeds Dr. C. F. McClintic as state health commissioner.

Department Heads

Mrs. Ruth Boudreault, R.N., superintendent of nurses at Northern Permanente Hospital, Vancouver, Wash., has been selected as superintendent of nurses at the new Southern Permanente Hospital, Fontana, Calif. Succeeding her at Northern Permanente is Mrs. Marie Maynard.

Miscellaneous

Dr. Victor H. Johnson, associate professor of physiology and dean of students in the division of biological sciences at the University of Chicago, recently became secretary of the Council on Medical Education and Hospitals of the American Medical Association. Dr. B. C. H. Harvey, who retired from the University in 1940, will return as acting dean.

Honor Roll

Hospital administrators and assistant administrators serving in the armed forces:

U. S. ARMY

Alvin Langehaug (1st Lt.), Lutheran Hospital, Fort Dodge, Iowa.

Ralph Judd Hromadka (2d. Lt.), Santa Monica Hospital, Santa Monica, Calif.

Mrs. Charlotte Lawson (Reserve Nurse, Red Cross Nursing Corps), Rutherford Hospital, Murfreesboro, Tenn.

Dr. Cornelius P. Rhoads (Col.), Memorial Hospital for the Treatment of Cancer and Allied Diseases.

Ladislaus Grapski, recent graduate of the course in hospital administration at the University of Chicago, has received a commission as second lieutenant in the Medical Administrative Corps.

Dr. Raymond A. Vonderlehr has been appointed director of District No. 6 of the U. S. Public Health Service which covers Puerto Rico and the Virgin Islands. Doctor Vonderlehr has just completed eight years of duty as assistant surgeon general in charge of the division of venereal diseases.

Deaths

Mother Enrica Paleni, Superior and director of Columbus Hospital in New York City, died recently.

E. E. King, superintendent of the Missouri Baptist Hospital, St. Louis, died suddenly of a heart attack.

Dr. Carl W. Apfelbach, medical director of Presbyterian Hospital, Chicago, died June 25 after many years of distinguished service with the institution. First a pathologist, he was made director of the hospital in 1942.

Dr. Stephen H. Ackerman, medical superintendent of Coney Island Hospital, Ocean Parkway, Brooklyn, N. Y., died recently at the age of 57.

Dr. W. G. Paradis, administrative head of Sunnyrest Tuberculosis Sanatorium, Crookston, Minn., died recently.

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CLINICAL observations have demonstrated that certain infectious diseases, such as chickenpox, measles, and upper respiratory infections, may spread under conditions in which direct and indirect contacts have been eliminated and where the only remaining vector is the air.

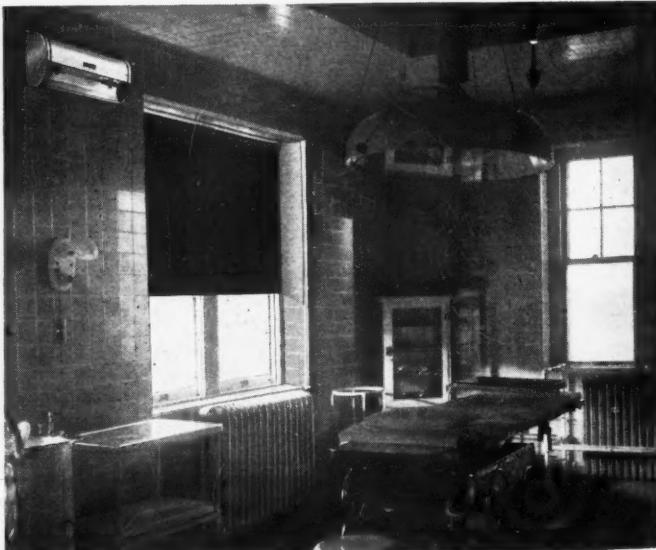
Evaporation of minute droplets expelled in expiratory processes enabled infection to ride these droplet nuclei on air currents.

Ultraviolet irradiation has proved effective in destroying air-borne droplet nuclei containing pneumococci, hemolytic streptococci, tubercle bacilli, influenza virus Type A, and other organisms. The history of ultraviolet disinfection of air for control of epidemic contagion dates back to 1932.

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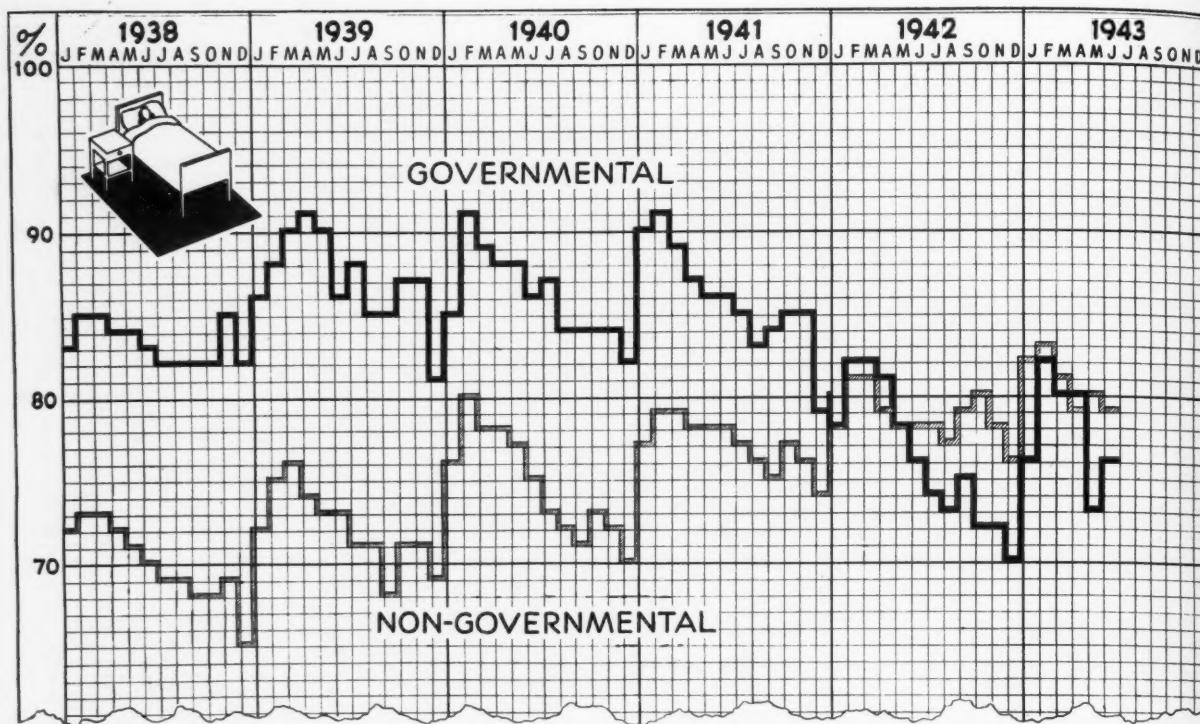
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Occupancy in Voluntary Hospitals Stays High



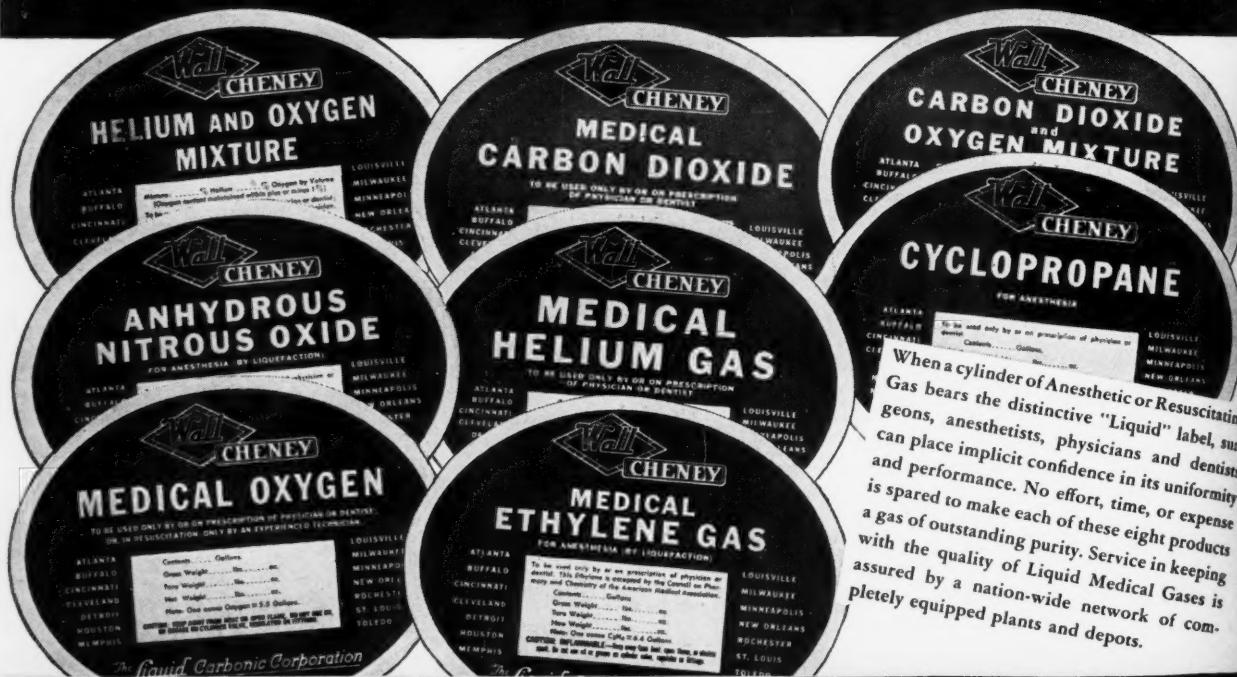
Voluntary hospital occupancy continued at a relatively high level in May and June while occupancy in the governmental general hospitals dropped sharply in May but recovered somewhat

in June. Thus, the voluntary hospitals continued to have a small lead over the local governmental institutions.

Twenty-six hospital construction projects were reported from June 14 to July

12 but only 19 gave the value, which totaled \$7,740,600. This brings the total since January 1 to \$82,635,600. Deducting the postponed projects of \$18,995,700 leaves a net construction of \$63,639,900.

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